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EIGHTEENTH ANNUAL REPORT

OF THE

COMMISSIONER OF RAILROADS

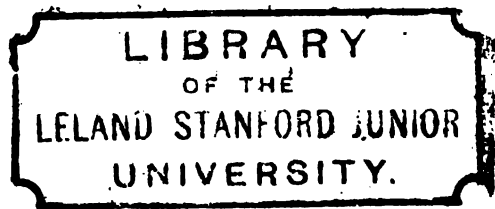
STATE OF MICHIGAN.

FOR THE YEAR 1890.



BY AUTHORITY.

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1890.



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## OFFICERS OF THE DEPARTMENT.

1890.

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JOHN T. RICH, LAPEER Co., *Commissioner.*

WYLLYS C. RANSOM, KALAMAZOO Co., *Deputy Commissioner.*

CLINTON B CONGER, ST. CLAIR Co., *Mechanical Engineer.*

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### OFFICIAL ADDRESS:

LANSING, - - MICHIGAN.



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MADE TO THE COMMISSIONER OF RAILROADS FOR THE YEAR ENDING  
DECEMBER 31, 1889.

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# REPORT.

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STATE OF MICHIGAN.  
OFFICE OF THE COMMISSIONER OF RAILROADS, }  
*Lansing, December 1, 1890.*

HON. CYRUS G. LUCE,

*Governor of the State of Michigan:*

SIR—As required by the organic law of this department, I respectfully hand you herewith, the eighteenth annual report from this office, covering the several returns of the mileage, traffic and financial condition of railroad corporations doing business in this state during the year ending December 31, 1889. It also includes such matters of current administration as are of interest alike to the companies and the public, with such recommendations for the enactment of new laws or amendments to those already in force, as practical experience has in the judgment of the Commissioner, having due regard to the welfare of the State and its people shown to be desirable.

So rapid has been the development of the railroad system of this country, and so vast the interest involved, in the construction and operation, that it could hardly be expected that legislation would be had, in all cases, in exact harmony with the varied conditions incidental to the properties, service and traffic of our internal systems of transportation. But so far as I am able to judge from reports received from other states the situation in Michigan will compare favorably with that of any other, in the general acquiescence of our railroad corporations in the laws passed for their government, the satisfactory working of such laws, and the general condition of prosperity resultant therefrom. The continued investment of capital for the extension of our railroads into districts not already provided with transportation facilities, and the construction of laterals to the lines previously in operation, demonstrate the wisdom of conservative legislation for the encouragement of them and projected enterprises to be realized in the near future. The legislation of this State has been exceptional in that it has not sought to regulate in detail the classification of freight nor the tariff charges for their carriage. A law authorized by the constitution, in force for many years has fixed a maximum for car load rates. But in the absence of statutory provisions determining what number of pounds should constitute a car load, and the largely increased size of cars from those in use at the

time the law was enacted, has rendered the provisions practically inoperative and rates are generally quoted per the hundred weight or per ton per mile. Shippers appear satisfied with the situation, no complaints of unreasonable rates having reached this office during the year and the average freight rate for Michigan railroads continuing the lowest of any in the country with the possible exception of Ohio. The last legislature as you are aware passed a graduated law regulating passenger rates which went into effect about the 1st of October, of last year. At first some of the companies affected by the provision of the law, complied with its requirements, while others declined to do so. Those so complying soon returned to the three cent rate authorized previously to the passage of the act in question and made up a test case for adjudication in the courts.

The case was argued and reargued in our supreme court upon appeal from the circuit, where the validity of the act was upheld but at this writing the court of last resort has not handed down its opinion and consequently the enforcement of the law has remained in abeyance. From the very limited number of earnings statements that reached this office from companies for a time complying with the law, it was not possible to determine what its effect would be upon the revenues of such Companies, or upon the rates charged by connecting or competing lines not directly affected by the change of rates contemplated by the statute. But one of the great trunk lines of the State, the Chicago & Grand Trunk, came within the two cent rate; its competitors, the Michigan Central and Lake Shore and Michigan Southern Companies, having special charters, and therefore not amenable to the provisions of the general railroad law.

Should the courts finally affirm the constitutionality of the law, its enforcement may have the effect expected by its framers and result in a general reduction of passenger fares to two cents per mile on all the principal lines in the state. What the effect of such an outcome would be on the financial condition of the companies is problematical. While it is not improbable that the older and stronger companies might without serious impairment of income be limited to a two cent rate it can scarcely be doubted that such a reduction would work great hardship upon the newer and local lines, and reduce their earnings to a sum insufficient to pay fixed charges, and in some cases perhaps, even running expenses. In my judgment it is of the highest importance that in legislation upon this subject, the efficient maintenance of the properties should not be lost sight of. Any policy that would compel the companies to permit their plants to retrograde from their present desirable condition would be a mistaken one. Our people are as much interested in having safe and speedy transportation as they are in having it cheap. The corporations are cooperating with the department for the enforcement of the police regulations of the State in provision for all those safe-guards which have been devised for the protection of the public and employes such as power and air brakes, automatic couplers improved car heaters interlocking and derailling systems at railroad crossings, safety gates at street and highway crossings, safety signals at frequent intervals along the tracks whereby the movements of trains are accelerated and secured against danger of collisions, and many other appliances of similar character, expensive of erection and maintenance, but important factors in the saving of human life and limb, and in all



of which our Michigan companies are rapidly coming to be fully abreast of the inventive genius of the age—

## CORPORATIONS.

The present report includes returns as required by law, of seventy-three corporations of which sixty-five are classified as commercial roads built for purposes of general traffic, and eight, ore or forest roads used for the movement of forest or mining products exclusively. The latter class with few exceptions must be regarded as ephemeral in character, as they are dismantled and abandoned when the timber contiguous to them is cut and carried away to mills or market. The number of corporations reported is one in excess of last year. Of the commercial roads, including the Detroit Union Railroad Depot and Station Company twenty-six are leased or proprietary concerns, leaving thirty-nine corporations owning or controlling, and operating the general traffic roads of the state; with those of the ore and forest roads forty-seven in all. The corporate status of the list of Michigan companies is not essentially changed from our last report.

The Chicago and Canada Southern has been reorganized as the Detroit and Chicago Railroad and takes its place among the proprietary properties of the Lake Shore and Michigan Southern Company. The Port Huron and Northwestern has been merged with the Flint and Pere Marquette under the enabling act of 1888, and the Manistee and Northeastern Railroad and Wisconsin Central Company appear with their first reports to this department. The latter company reports for its entire system, embracing a mileage of 346.29 miles, only 13.74 of which are in this State, comprised in what is known as the Gogebic and Montreal River Division. It is apparent that the report for 1889 was made by this company through misapprehension of our law, and should have been restricted to figures for the Gogebic and Montreal River only. Since the rendition of the report as printed, the company has filed an amended report to conform to the existing facts which materially change the figures as first given.

Since the close of the last year the Battle Creek and Sturgis road has been acquired by the Michigan Central and Lake Shore and Michigan Southern Companies and divided at Findley, giving to the former 34 and to the latter 37 miles of what was formerly known as the Canada and St. Louis Railway between Battle Creek in this state and Goshen in the state of Indiana and now operated by them as a part of their respective systems.

The Milwaukee and Northern Railroad reporting, including the Ontonagon and Brule River Division a track mileage of 366.55 miles of which 106.85 are in Michigan, has recently passed under the control of the Chicago, Milwaukee and St. Paul Railroad Company and will hereafter form a part of the vast system of that corporation which has in operation nearly or quite 6,000 miles of road, extending into the remotest portion of the great northwest.

It is also understood that the Wisconsin Central properties have been leased in perpetuity to the Northern Pacific Railway Company which will in future operate them as a portion of its own system, including the short line in Michigan incorporated as the Gogebic and Montreal River Railroad, thus giving our state a representation in the great

transcontinental road that now extends from lake Superior to the Pacific ocean with branches and laterals ramifying nearly every part of the vast territory it traverses, making an operative system of three thousand five hundred miles of road.

The Canadian Pacific Company whose great property forms another transcontinental roadway stretching from the Atlantic to the Pacific with branches extending to nearly every important point in the settled portions of British North America not to be outflanked by their more southern rival, the Northern Pacific, has secured control of the Duluth South Shore and Atlantic system and the Michigan Division of the Minneapolis, St. Paul and Sault Ste. Marie road in the Upper Peninsula both of which properties will hereafter be operated under the auspices of the great Canadian company, making the Sault an entrepot of its vast trade between the oceans.

The Cincinnati, Saginaw and Mackinaw railroad constructed by Saginaw capitalists between Durand and Bay City to give an additional outlet for the immense traffic of the Saginaw valley, has recently passed under the control of the Chicago and Grand Trunk Railway Company by which corporation it will hereafter be operated as a part of the important Canada Grand Trunk system in Michigan. During the past year the construction of a tunnel under the St. Clair river at Port Huron has been successfully accomplished, and the great work will soon be completed and trains passing through it giving the Grand Trunk continuous rail for its immense traffic from Chicago to tide water. The importance of this enterprise in its effect upon the transportation question in this country can hardly be overestimated.

The Cincinnati, Jackson and Mackinaw property is still in the hands of a receiver but its increasing business warrants the belief that a new company will soon be organized for the management of its affairs on a permanent basis.

Since the last report from this office the Toledo and South Haven Railroad has also passed into the hands of a receiver where it will probably remain until means can be found for its extension and consequent larger traffic.

From the report compiled at the State Department it would seem that the spirit for railroad building has suffered little or no diminution during the last year. From October 1, 1889 to September 30, 1890, articles of association for 15 new railroad corporations with capital stock of \$14,403,000 and projected new lines of track of 929 miles were filed with the Secretary of State. Some of the enterprises contemplated by the new organizations are already in process of construction, and others doubtless will be commenced another season and pushed to completion as fast as resources at hand will permit. The Allegan and Lake Shore, the Colfax and Big Rapids, the Mecosta, and the Paris and Pere Marquette River, all forest roads have been taken up and abandoned, the timber in their vicinity having been lumbered. The Buckley and Douglas, another forest road, has been absorbed by the Manistee and Northeastern.

#### TRACK MILEAGE.

The total miles of track owned by Railroad Companies doing business in Michigan December 31, 1889, was 12,480.88, an increase of 835.35 or

COMMISSIONER OF RAILROADS.

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7.17% from the preceding year. Of this mileage 6,759.55 miles were in the state being in excess of last report 347.89 miles and 5.43%. The total miles operated was 14,722.61, 7,018.73 being in Michigan or 48.35% of the entire systems reported. The foregoing exhibit falls short of the total mileage at the close of the last year, as estimated in our last annual report, 13.84 miles, some of the companies falling short of the estimates of new mileage by them transmitted to this office.

The following statement exhibits in detail the increase or decrease of track as reported by the several companies for the year 1889.

*Statement of changes in track mileage owned in Michigan during the year ending December 31, 1889.*

Companies.	Increase. Miles.	Decrease. Miles.
<i>General Traffic Roads.</i>		
Battle Creek & Sturgis .....	41.50	.....
Bay City & Battle Creek .....	17.30	.....
Chicago & Canada Southern,—transferred to L. S. & M. S. ....	.....	62.94
Chicago, Kalamazoo & Saginaw .....	13.62	.....
Chicago & Northwestern .....	63.79	.....
Cincinnati, Saginaw & Mackinaw .....	62.00	.....
Detroit, Bay City & Alpena .....	4.89	.....
Duluth, South Shore & Atlantic .....	13.23	.....
Marquette, Houghton & Ontonagon .....	2.95	.....
Marquette & Western .....	.....	1.82
Flint & Pere Marquette .....	27.36	.....
Frankfort & South Eastern .....	22.00	.....
Grand Rapids & Indiana .....	.....	.71
Lake Shore & Michigan Southern, (C. & C. S.) .....	62.94	.....
Manistee & North Eastern .....	18.86	.....
Manistique .....	16.75	.....
Mason & Oceana .....	7.00	.....
Michigan Air Line Ry. ....	.01	.....
Detroit & Bay City .....	3.43	.....
Saginaw & Northwestern .....	2.10	.....
Milwaukee, Lake Shore & Western .....	.04	.....
Milwaukee & Northern .....	2.75	.....
Ontonagon & Brule River .....	26.10	.....
Toledo, Ann Arbor & North Michigan .....	3.00	.....
Wisconsin Central .....	13.74	.....
<i>Ore and Forest Roads.</i>		
Allegan & Lake Shore (Abandoned and taken up) .....	.....	4.00
Buckley & Douglas (Now Manistee & N. E.) .....	.....	8.00
Colfax & Big Rapids (Abandoned and taken up) .....	.....	10.00
Crawford & Manistee River .....	3.00	.....
Grass Lake & Manistee River .....	1.50	.....
Manistee & Luther .....	16.50	.....
Mecosta .....	.....	10.00
North Branch & Sauble River .....	10.00	.....
Paris & Pere Marquette River (abandoned and taken up) .....	.....	16.00
Total .....	461.36	113.47

\* Grass Lake & Manistee River.

PRIVATE RAILROADS.

In this connection I again call attention to the fact that there are in addition to the track owned and operated by the regular incorporated companies, several hundred miles of railroad controlled by private parties or copartnerships. It is believed that these concerns largely escape taxation, and also ignore the police regulations enacted for the protection of the public and railroad employes. Their tracks in some instances

are built across those of the regularly incorporated roads at grade, and are not provided with the safe-guards, essential to safe operation of either property, while the equipments used by the private concerns are frequently very deficient in appliances absolutely necessary to the safety of their employes. I respectfully recommend that the provisions of the general railroad Laws be extended over private and tram railroads to bring them within the scope of the police regulations of the state and that the jurisdiction of the Commissioner be extended for the proper enforcement of the same.

#### CONSTRUCTION 1890.

While the amount of new track laid during the current year has not equalled the mileage of either of the two previous years, still the work has been fairly active and in the aggregate adds—miles to the track reported at the close of the last year as shown by reports sent to this office to enable it to estimate the entire track that will be opened for operation in the State December 31, 1890. You are respectfully referred to the accompanying statement for details of the new construction.

*STATEMENT.—Approximately showing Mileage of New Main Track completed in Michigan during the year ending December 31, 1890.*

Companies.	Miles.
Chicago & Grand Trunk .....	11.00
Chicago & Northwestern .....	
Chicago & West Michigan .....	74.00
Detroit, Bay City & Alpena .....	26.75
Detroit, Lansing & Northern .....	6.49
Grand Rapids & Indiana .....	27.35
Indiana & Lake Michigan, (Vandalia Line) .....	25.00
Manistee & Northeastern .....	23.00
Manistique .....	6.00

In addition to the foregoing the following new lines with estimated mileage as below given are under active construction and expected to be open for traffic the next season.

The Grand Rapids Chicago and St. Louis, Grand Rapids to New Buffalo .....	100 miles
The Escanaba Iron Mountain & Western, Menominee River to Little Bay de Noc .....	54 "
The Manistee & Grand Rapids Railroad, Manistee to Grand Rapids .....	115 miles.
The Iron Range & Huron Bay Railroad, Champion to Huron Bay .....	50 "
The Manistee and North Eastern, Traverse City Extension .....	20 "
In all 339 miles.	

Surveys have been completed and maps of location approved or filed for approval with the State Board of Railroad Crossings for the following:

The Chicago & West Michigan Charlevoix extension Traverse City to Charlevoix.....	75 miles.
The Columbus Lima & Milwaukee Railway, Between Allegan and Saugatuck.....	25 "
The Detroit & Toledo Railroad, Detroit to Ohio State Line.....	55 "
The Lake Michigan and Lake Superior Railroad, Gladstone to Palmer, Upper Peninsula.....	70 "

These lines it is understood are to be put under contract in the near future and pushed to completion during 1891 making a probable aggregate of new roads to be constructed the next year, of 564 miles, exclusive of a number of short roads and extensions not included in this calculation, which will give an estimated increase of our track mileage of at least six hundred miles.

The present seems a fitting occasion to briefly review the progress made in the construction of railroads in Michigan during the last decade. December 31, 1879, the entire mileage in the State was 3,657. December 31, 1889, as per foregoing statement it had increased to 6,759.55, 84.84%; at the former date we had one mile of railroad to each sixteen square miles of territory and at the latter, one for each 8.73 square miles. The Upper Peninsula ten years ago had 282.77 miles of track. Now it has nearly thirteen hundred miles. Every county in that once remote portion of our State being provided with railroad facilities. In the Lower Peninsula every county save three is similarly favored, and another year will doubtless see these last in line with the others in that particular. At the close of 1879, there were 809 railroad stations and 14,774 employes in the State, which at the close of 1889, had increased to 1,435 stations and 24,105 employes, figures that unerringly indicate the rapid development of our railroad system during the last decade.

I subjoin the statement which has been continued in these reports through many years giving the statistics of construction in this State since 1838:

*Table showing Progress of Railroad Construction in Michigan from 1838 to 1889 inclusive.*

Years.	Miles.	Years.	Miles.
1838.....	63	1864.....	891
1839.....	71	1865.....	931
1840.....	104	1866.....	943
1841.....	147	1867.....	1,060
1842.....	147	1868.....	1,120
1843.....	180	1869.....	1,962
1844.....	220	1870.....	1,789
1845.....	223	1871.....	2,298
1846.....	279	1872.....	2,822
1847.....	279	1873.....	3,352
1848.....	326	1874.....	3,313
1849.....	353	1875.....	3,347
1850.....	380	1876.....	3,410
1851.....	421	1877.....	3,455
1852.....	425	1878.....	3,564
1853.....	425	1879.....	3,657
1854.....	425	1880.....	3,823
1855.....	462	1881.....	4,252
1856.....	530	1882.....	4,600
1857.....	579	1883.....	4,966
1858.....	708	1884.....	5,120
1859.....	770	1885.....	5,247
1860.....	770	1886.....	5,577
1861.....	777	1887.....	5,768
1862.....	811	1888.....	6,411
1863.....	812	1889.....	6,780

## CAPITAL STOCK.

The reports continue to show large accretions to the stock accounts of our railroad corporations; your attention is respectfully directed to tabular statement No. 3 accompanying this report for full details appertaining to the capital reported as being invested on our railroad system. The whole number of shares issued of different par value of each share, is stated at 3,707,051, representing different classes of stock as follows.

Common .....	\$259,658,048 31
Preferred .....	94,544,947 84
	<hr/>
	\$354,202,996 15
Paid in on shares not issued.....	1,746,276 69
	<hr/>
	\$355,949,272 84

This is a claimed stock capitalization of \$20,508.21 per mile of road. In aggregate amount it is an increase of \$66,371,336.75 or 22.99 per cent upon the report of the previous year. Per mile of road it is a decrease of \$4,351.80 or 17.50 per cent, the result of largely decreased capitalization upon the increased mileage owned.

# COMMISSIONER OF RAILROADS.

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The whole number of stock holders listed was 13,387 of whom 1,010 were citizens of Michigan, the latter holding \$9,130,000 only of shares issued, or 2.58 per cent of the whole.

## INDEBTEDNESS.

The corporate indebtedness of our railroad companies is also largely increased from the last report, and figures at a total of \$421,703,577.20 classified as follows:

	Per cent.
Funded debt.....	\$393,363,187.01—93.28
Unfunded debt.....	28,340,390.19— 6.72
	<hr/>
	\$421,703,577.20

The above is an increase over the preceding year for the

	Per cent.
Funded debt.....	\$97,565,827.09—32.98
Floating debt.....	1,533,713.39— 5.72
	<hr/>
Total debt.....	\$99,099,540.48—30.72

Per mile of road owned there was \$33,757.00, an increase of \$8,444.87, or 33.25 per cent from the figures of the preceding year. This unusual increase of indebtedness results very largely from the reorganization of the Wabash which alone contributes \$78,000,000.00 of the entire amount. Reference may be had to the following statement which exhibits in detail the increase and decrease of the debt accounts during the last fiscal year of the several companies included in this report.

ANNUAL REPORT OF THE

STATEMENT Showing changes in Indebtedness of Michigan Railroads, 1889.

Companies.	Increase.	Decrease.
<i>Commercial Roads:</i>		
Battle Creek & Sturges (new).....	\$500,000 00	-----
Chicago & Grand Trunk.....	67,467 99	-----
Chicago & Northwestern.....	-----	368,783 83
Chicago & West Michigan.....	1,132,971 89	-----
Cincinnati, Jackson & Mackinaw.....	-----	733,767 56
Cincinnati, Jackson & Mackinaw (Receiver).....	116,171 40	-----
Cincinnati, Saginaw & Mackinaw.....	836,896 23	-----
Cincinnati, Wabash & Michigan.....	16,554 44	-----
Detroit, Bay City & Alpena.....	-----	6,598 65
Detroit, Grand Haven & Milwaukee.....	594,541 12	-----
Detroit, Lansing & Northern.....	48,189 86	-----
Grand Rapids, Lansing & Detroit.....	3,921 29	-----
Duluth, South Shore & Atlantic.....	1,922,483 19	-----
Marquette, Houghton & Ontonagon.....	-----	47,000 00
Flint & Pere Marquette.....	2,489,527 30	-----
Port Huron & Northwestern.....	-----	2,742,405 06
Frankfort & South Eastern (new).....	222,000 00	-----
Grand Rapids & Indiana.....	588,074 82	-----
Hancock & Calumet.....	-----	18,881 19
Lake Shore & Michigan Southern.....	-----	2,217,737 23
Lowell & Hastings.....	121,868 02	-----
Manistee & North Eastern.....	567,088 33	-----
Manistique.....	80,276 79	-----
Mason & Oceana.....	5,782 87	-----
Michigan Air Line Railway.....	-----	37,534 25
Michigan Central.....	980,900 42	-----
Canada Southern Bridge (M. C. Prop.).....	75,350 10	-----
Jackson, Lansing & Saginaw (M. C. Prop.).....	-----	60,000 00
Kalamazoo & South Haven (M. C. Prop.).....	-----	10,000 00
Michigan, Midland & Canada (M. C. Prop.).....	25,921 29	-----
Toledo, Canada Southern & Detroit (M. C. Prop.).....	-----	2,817 00
Milwaukee, L. S. & Western.....	672,946 15	-----
Milwaukee & Northern.....	904,960 01	-----
Mineral Range.....	-----	29,850 54
Minneapolis, St. Paul & Sault Ste. Marie.....	88,824 23	-----
Muskegon, Grand Rapids & Indiana.....	-----	11,951 71
Pontiac, Oxford & Northern.....	-----	1,945,433 53
Saginaw, Tuscola & Huron.....	38,061 14	-----
Saginaw Valley & St. Louis.....	9,482 01	-----
Toledo, Ann Arbor & North Michigan.....	211,948 23	-----
Toledo, Saginaw & Muskegon.....	49,821 21	-----
Toledo & South Haven.....	20,601 13	-----
Wabash.....	78,000,000 00	-----
Wisconsin Central.....	20,459,848 76	-----
<i>Ore and Forest Roads:</i>		
Bear Lake & Eastern.....	-----	2,780 98
Buckley & Douglas.....	-----	110,967 17
Hecla & Torch Lake.....	407,249 60	-----
Hobart & Manistee River.....	-----	6,845 72
Lake County.....	400 00	-----
Manistee & Luther.....	-----	30,480 71
North Branch & Sauble River.....	16,738 91	-----



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## STOCK AND DEBT.

The total stock and debt reported at the close of the last fiscal year was \$744,014,225.72, being \$59,535.55 per mile of road owned and an increase of \$131,832,252.91, 21.53 per cent and \$9,357.64, 18.64 per cent respectively. This very heavy and largely increased capitalization of our roads will hardly fail to attract unfavorable attention, and ought to influence legislation for the prevention of fictitious values in the capital account of railroad corporations hereafter.

## COST.

The total cost of roads and equipments reported to this office at the close of the year 1889 was \$690,006,646.56 the same being an increase of \$140,724,356.29 or 25.62 per cent on the figures of the previous report. Per mile of road owned it was \$55,207.63 being \$8,040.83 or 17.05 per cent in excess of similar value for 1889. From this showing it appears that the ratio of cost to the total stock and debt has slightly increased during the year under report, the former being 93.28 per cent of the latter, leaving the excess of stock and debt over cost 6.72 per cent as against 10.28 the last year, a decrease of 3.56 per cent. The proportion of cost for Michigan is \$265,720,770.83 an increase of \$17,303,391, 6.86 per cent from the last report. The Michigan proportion of cost is now 38.51 per cent of the whole. The total excess of stock and debt over cost of the properties as shown by the last report was \$54,007,579.16 and \$4,327.22 per mile of road owned. The usual statement showing excess of stock and debt over cost for each year since the organization of the department is appended. The figures for 1889 show a falling off of \$8,892,103.38 the result of reorganization rather than of actual increase of property values reported by the companies.

## COMPARATIVE STATEMENT.

### *Stock and Debt with Cost.*

Year.	Excess of Stock and Debt over Cost.
1873	\$14,605,531 11
1874	13,241,471 81
1875	17,563,469 80
1876	19,556,513 93
1877	20,102,224 28
1878	18,435,558 69
1879	17,091,975 90
1880	16,563,711 82
1881	20,150,073 00
1882	28,322,983 60
1883	41,768,609 09
1884	47,397,518 61
1885	50,543,044 88
1886	50,294,846 20
1887	48,982,240 38
1888	62,899,682 54
1889	54,007,579 16

## ANNUAL REPORT OF THE

## FINANCES.

*General Exhibit of Receipts and Disbursements.*

The total revenue realized from the operation of Michigan railroads during the year 1889 was \$96,423,071.62. For the previous year it was \$80,667,765.03, the outcome being the sum of \$15,755,306.59 or 19.53 per cent in favor of the year under report.

The operating expenses for the same period were \$64,613,791.98, leaving a net income for the year on traffic account of \$31,809,279.64, which was in excess of net income the preceding year \$6,136,631.28, or 23.90 per cent.

From the net surplus of traffic receipts over operating expenses and taxes were paid the fixed charges, rentals and dividends as follows:

Interest on the funded debt.....	58.38%	\$18,571,574 66
Interest on the floating debt.....	3.30	1,050,312 07
Rentals, etc.....	13.14	4,166,871 15
Dividends .....	25.18	8,096,184 32
Total disbursements.....		\$31,884,942 20
Net deficit of receipts to disbursements for the year.....		75,662 56

which was paid from the balances on hand in the income account at the close of the preceding year. The following formulated from the balance sheets of the several corporations, covers all sources of revenue and classes of expenditure, and presents in concise form their financial transactions and condition for the last fiscal year.

## GENERAL BALANCE SHEET.

## THE RAILROAD COMPANIES OF MICHIGAN ON GENERAL ACCOUNT.

## Dr.

To Balance forward from 1888.....	\$20,494,495 29
Revenue from operation, 1889.....	96,423,071 62
Income from sources other than operation—net.....	68,285 82
Balance of credit items from accounts of reorgan- ized or transferred companies .....	4,366,233 44
	\$121,362,086 17

## Cr.

By Operating expenses and taxes, 1889.....	\$64,613,791 98
Interest on funded debt.....	18,571,574 66
Interest on floating debt.....	1,050,312 07
Rentals .....	4,166,871 15
Dividends .....	8,096,184 32
Balance forward to 1890.....	24,853,351 99
	\$121,352,086 17

The credit balance forward carries in the income account an increase of \$4,358,856.70 from the figures of the previous year.

ANALYSIS OF EARNINGS AND EXPENSES.

The total traffic earnings for 1889 footed at the sum of \$87,219,726.28 an increase from the previous year of \$7,118,069.95 or 8.78 per cent. For the same period the total operating expenses including taxes were \$64,614,854.95 being an increase over 1888 of 17.47 per cent, the net increase of per cent of expenses to earnings being 8.69 per cent.

The traffic earnings were classified between passengers and freights as follows:

Passengers	31.82%	\$27,754,110 15
Freight	68.18%	59,465,616 13
		<hr/> \$87,219,726 28

The above is an increase of receipts from passenger traffic the previous year of \$2,160,430.15 and from freight traffic of \$5,751,800.47. The ratio of passenger earnings to freight is .46 less.

The receipts of the passenger department accrued as follows:

From ticket sales	84.61%	\$23,482,384 19
express and baggage	5.98%	1,660,429 98
mails	8.98%	2,491,798 00
other sources	.43%	119,011 93
		<hr/> \$27,753,624 10

The revenue of the freight department was derived

From transportation of freights	99.44%	\$59,132,921 86
other sources	.56%	332,694 27
		<hr/> \$59,465,616 13

COMPARISON OF CLASSIFIED EARNINGS 1888 AND 1889.

*Transportation of Passengers.*

1889	84.61%	\$23,482,384 19
1888	85.35%	21,849,112 91
Decrease	.74%	Increase \$1,633,271 28

*Express and Baggage.*

1889	5.98%	\$1,660,429 98
1888	6.30%	1,612,028 30
Decrease	.32%	Increase \$48,401 68

*Mails.*

1889	8.98%	\$2,491,798 00
1888	8.17%	2,096,617 09
Increase	.81%	Increase \$401,180 91

## ANNUAL REPORT OF THE

*Other Sources.*

1889.....	.43%	\$119,011 93
1888.....	.16%	41,921 70
Increase .....	.27%	Increase \$77,079 30

## TRANSPORTATION OF FREIGHT.

*Freights.*

1889.....	99.44%	\$59,132,921 86
1888.....	99.78%	53,595,783 69
Decrease .....	.34%	Increase \$5,537,138 17

*Other Sources.*

1889.....	.56%	\$332,694 27
1888.....	.22%	118,031 97
Increase .....	.34%	Increase \$214,662 28

The traffic earnings average per mile of road \$5,924.22 an increase of \$114.58 and 1.97 per cent over results of previous year.

Per train mile the traffic earned as follows:

	1889.	1888.		
Passenger trains.....	\$1.04.04	\$1.10	Decrease	\$0.05.96
Freight trains.....	1.33.02	1.12.7	Increase	0.20.32
All trains earning revenue.....	1.22.09	1.11.7	Increase	0.10.49

*Operating Expenses.*

Operating expenses and taxes for the year under report amounted to the sum of \$64,614,854.95, distributed between the several classes of expenditures, as follows:

Maintenance of way and buildings.....	\$13,325,210 77
Maintenance of rolling stock .....	10,321,906 23
Conducting transportation .....	32,109,857 56
General expenses and taxes.....	8,857,880 39
	<hr/>
	\$64,614,854 95

This is an increase upon the outlay for the previous year of \$9,612,994.10 or 17.47 per cent. But with increased train mileage of 12.70 and unusual activity in the repair shops, and road department the increase indicates no lack of economy on the part of the managers in charge.

Statement No. 8 appended to the report is a full exhibit of expenditures of the different corporations for the year 1889 and from it I have prepared a comparative statement in detail with expenses for the previous year which is submitted as follows:

# COMMISSIONER OF RAILROADS.

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## COMPARATIVE CLASSIFIED EXPENSES 1888 AND 1889.

### *Maintenance of Way and Buildings.*

	Per Cent.	
1889.....	20.62	\$13,325,210 77
1888.....	21.10	11,604,422 51
Decrease.....	.48	Increase.. \$1,720,788.26—14.82%

### *Maintenance of Rolling Stock.*

1889.....	15.99	\$10,321,906 23
1888.....	14.62	8,039,225 35
Increase.....	1.37	Increase.. \$2,282,680 88—28.39%

### *Conducting Transportation.*

1889.....	49.69	\$32,109,857 56
1888.....	51.17	28,144,779 04
Decrease.....	8.52	Increase.. \$3,965,078.52—14.08%

### *General Expenses and Taxes.*

1889.....	13.70	\$8,859,880 39
1888.....	13.11	7,213,433 95
Increase.....	.59	Increase.. \$1,644,446 44—22.79%

Per mile of road operated the expenses were \$4,388.01 being in excess of amount for the previous year; per train mile they figured at \$0,93.94, \$0,07.14 more than for 1888, while the per cent of expenses to earnings was 74.08 as against 68.90 for the previous report, an increase of 5.18 per cent.

## OPERATIVE RECEIPTS IN ADDITION TO TRAFFIC EARNINGS.

Income derived from other sources than traffic operations was reported at the sum of \$926,865.10 being a decrease of \$328,151.03 or 26.14 per cent from like report for the previous year.

## INCOME FROM SOURCES OTHER THAN OPERATING.

Receipts from dividends on stock in treasury belonging to the companies, premiums on bonds, leases, sales of property and on all other accounts other than operating were reported at \$1,039,887.96 making the gross income of our railroad corporations for the year under report \$89,186,479.34. Per mile of road operated this was \$6,057.78; per train mile \$1,249.

Computed upon a pro rata mileage the Michigan proportion on account of gross income and expense was as follows:

Gross income (38.12%).....	\$34,001,787 15
Total expenses (35.08%).....	22,665,308 82
Total net earnings for Michigan.....	\$11,336,448 33

The total cost of the railroads in this State as heretofore shown in this report is \$265,720,770.83 figured at the rate of \$55,207.63 per mile. The net gross earnings per mile of road as above shown was \$1,669.77 which would leave but 3.02 per cent of gross receipts for payment of fixed charges and dividends upon the capital invested, if computed for all the companies in the State equally. For purpose of convenient comparison I subjoin statement of earnings and expenses for five years commencing with 1885.

*Statement.*

Earnings and Expenses.	1885.	1886.	1887.	1888.	1889.
Total earnings .....	\$76,952,864 80	\$82,384,085 47	\$81,556,252 85	\$79,778,407 40	\$87,219,726 28
Total earnings per mile of road .....	5,797 00	6,047 66	6,574 95	5,809 64	5,924 23
Total earnings per train mile .....	1 24.9	1 24.42	1 40.48	1 11.7	1 22.19
Total expenses .....	54,183,635 01	54,216,624 19	52,389,984 30	55,001,860 85	64,614,854 95
Total expenses per mile of road .....	4,600 72	3,958 22	4,216 84	4,002 88	4,388 01
Total expenses per train mile .....	87.9	87.97	90.09	86.08	93.94
Percentage of expenses to earnings .....	70 35	65 45	64 28	68 90	74 08

FIXED CHARGES.

INTEREST.

The charges on interest account for the last fiscal year figured as follows:

On the funded debt .....	95.64%	\$18,571,574 66
On the floating debt .....	5.36%	1,050,312 07.
		<u>\$19,621,886 73</u>
Per mile of road owned .....		\$1,572 17
Per train mile .....		0 27.49
Per cent of earnings .....		22.49

INTEREST AND RENTALS.

Total .....	\$19,621,886 73
Per mile of road operated .....	1,332 77
Per train mile .....	0 27.40
Per cent of earnings .....	30 36

OPERATING EXPENSES, INTEREST AND RENTALS.

Total .....	\$84,236,741 68
Per mile of road operated .....	5,720 78
Per train mile .....	1 30.33
Per cent of earnings .....	96.58

Compared with the previous year the above figures show:

Total .....	Increase .....	\$10,561,423 67—14.34%
Per mile of road .....	" .....	354 99— 6.80
Per train mile .....	" .....	0 14.08
Per cent of earnings .....	" .....	4 23

DEFICIT OF EARNINGS TO EXPENSES.

But two companies failed during the year under report to make sufficient earnings to cover expenses of operation.

The Ontonagon and Brule River, deficit .....	\$5,362 01
Grass Lake and Manistee River, deficit .....	1,015 34
Total .....	<u>\$6,377 35</u>

The first of the above roads has become a portion of the Milwaukee & Northern and the second is a forest road used for logging purposes only, so that practically there are no properties of the Michigan system that are not earning their expenses.

DEFICITS IN GENERAL ACCOUNT.

Thirteen companies are reported as carrying forward debit balances at the close of the year, two less than shown in the previous report. Such debits aggregate the sum of \$2,165,983.15 as against \$4,861,654.71 a decrease of \$2,695,671.56 or 55.45 per cent from the last year. The following statement gives details under this head.

*Statement of Debt Balances in General Account 1889.*

Companies.	Amount.
Cincinnati, Jackson & Mackinaw .....	\$14,149 78
Duluth, South Shore & Atlantic .....	2,514 90
Grand Rapids & Indiana .....	204,179 44
Manistee & Northeastern .....	29,311 37
Minneapolis, St. Paul & Sault St. Marie .....	1,175,567 00
Ontonagon & Brule River .....	20,361 78
Saginaw, Tuscola & Huron .....	46,529 15
Saginaw Valley & St. Louis .....	100,627 95
Toledo, Saginaw & Muskegon .....	71,048 87
Toledo & South Haven .....	8,668 58
Wabash .....	288,474 03
Wisconsin Central .....	189,116 92
Hobart & Manistee River .....	15,638 55
Total for thirteen companies .....	<u>\$2,165,983 15</u>

DIVIDENDS.

Our list of dividend paying companies is but little changed from last year. The aggregate amount returned to share holders was \$8,096,184.32 which was in excess of the previous report \$267,072.75 or 3.41 per cent. A detailed statement showing companies paying dividends with stock paid in, and amount and rate per cent of dividends is subjoined.

*Statement of Dividend, 1889.*

Companies.	Capital Stock paid in.	Amount of Dividend.	Per Cent of Dividend.
Chicago, Detroit & C. G. T. Junction.....	\$1,095,000 00	\$109,500 00	4 % on common.
Chicago & Northwestern.....	74,815,320 53	3,444,504 00	6 % on common, 7 % on preferred.
Chicago & West Michigan.....	6,796,300 00	123,004 00	2 % on common.
Duluth, South Shore & Atlantic.....	1,278,456 00	196,707 25	6 % on M., H. & O. preferred.
Flint & Pere Marquette.....	6,342,000 00	390,520 00	6 % on preferred.
Lake Shore & Michigan Southern.....	50,000,000 00	2,473,325 00	5 % on common.
Mason & Oceana.....	150,000 00	7,418 75	5 % on common.
Michigan Central.....	18,738,204 00	936,910 20	5 % on common.
Milwaukee Lake Shore & Western.....	7,000,000 00	490,000 00	7 % on preferred, 6 % on common.
Total for nine companies.....	\$168,214,780 53	\$3,096,184 32	.....

The above statement shows an average dividend of 4.81 per cent upon the stock upon which the same was declared, an increase of .34 per cent from the previous year. The stock upon which dividends were paid was 47.25 per cent of the total amount paid in the residue \$187,734,492.31 making no returns to its owners whatever.

## DIVIDENDS AND INTEREST.

The dividends and interest upon the indebtedness together aggregated the sum of \$26,667,758.98 which for roads owned was \$2,136.45 per mile and 3.87 upon the reported cost of the properties.

## TRAFFIC.

The volume of traffic for both passenger and freight was largely increased over the previous year, but the average haul being something less.

## TRAIN MILEAGE.

The mileage of all trains earning revenue was considerably in excess of movements for 1888 as appears from the following comparative statement.

	1888.	1889.	Increase.
Passenger trains, miles run.....	23,285,996	26,675,694	3,389,698
Freight trains, miles run.....	40,044,160	44,702,514	4,658,354
Total increase.....			1,268,656

Being an increase of passenger train mileage of 10.26 per cent and of freight train mileage of 11.63 per cent and for all trains earning revenue 8,048,052 miles or 12.70 per cent.

## PASSENGER BUSINESS.

The whole number of passengers carried during the year was 31,136,050, as against 27,436,106 for the previous year, an increase of 3,699,944, 13.48 per cent made up in classes as follows:

Through passengers.....	673,253
Local passengers.....	30,462,797
Total .....	31,136,050



The average ride was 30.63 miles, being less by 6.47 miles than the previous year. The average fare paid by each passenger was \$0 75.41, 04.46 cents decrease from last report. The total number of passengers carried one mile was 1,139,527,824, an increase of 121,509,716, and 11.93 per cent from 1888. I subjoin the following statement as showing in detail the passenger business and rates of ten of the principal corporations doing business in the State:

*Statement of Average Passenger Rates, 1889.*

Companies.	Passengers Carried.	Average Through Rate.	Average Local Rate.	Average Rate for all.
Chicago & Grand Trunk.....	834,247	\$0 01.49	\$0 02.13	\$0 01.72
Chicago & Northwestern.....	11,897,363	02.41	02.28	02.24
Detroit, Grand Haven & Milwaukee.....	590,162	02.81	02.59	02.83
Flint & Pere Marquette.....	1,161,379	02.570	02.497	02.492
Grand Rapids & Indiana.....	1,074,383	02.535	02.408	02.417
Lake Shore & Michigan Southern.....	4,413,562	02.168	02.323	02.234
Michigan Central.....	3,133,373	01.98	02.42	02.81
Milwaukee, Lake Shore & Western.....	547,375	02.546	02.673	02.673
Duluth, South Shore & Atlantic.....	351,302	03.40	08	08.30
Detroit, Lansing & Northern.....	695,353	02.20	02.55	02.50

FREIGHTS.

The total tons of freight moved during the year under report was 54,569,264 being an increase upon the traffic of the preceding year of 8,834,091 tons and 19.32 per cent. The movements were classed as follows:

	Per Cent.	Tons.
Through freight.....	15.14	8,266,149
Local ".....	84.86	46,303,115
Total tonnage.....		54,569,264

The total freight mileage foots as follows:

	Per Cent.	Miles.
Through freight.....	26.08	2,032,104,151
Local ".....	73.92	5,758,528,052
Total, or tons moved one mile.....		7,790,632,203

This was an increase of 975,844,930 tons or 14.32 per cent upon the freight traffic of the preceding year.

Analyzed and compared with similar details for previous periods we have the following:

	1888.	1889.	Increase.	Decrease.
Average ton haul, miles.....	150.31	142.76		7.55
Average amount for each haul.....	\$1 18.4	\$1 08		\$0 10.4
Average rate per ton per mile.....	0 00.794	0 00.754		0 00.040

Below will be found a statement giving in detail the tonnage, movements and average rate per ton per mile realized by ten of the more important lines in this State.

*Statement of Tonnage and Average Freight Rates 1889.*

Companies.	Total Tonnage.	Rate per ton per mile Local.	Rate per ton per mile Through.	Average Rates for all.
Chicago & Grand Trunk .....	1,741,196	\$0 01.021	\$0 00.875	\$0 00.945
Chicago & Northwestern .....	11,880,177	00.91	00.52	00.60
Detroit, Grand Haven & Milwaukee .....	567,875	01.80	00.45	00.130
Detroit, Lansing & Northern .....	436,624	01.619	01.010	01.507
Duluth, South Shore & Atlantic .....	2,055,457	01.30	01.60	01.50
Flint & Pere Marquette .....	1,596,188	01.201	00.607	01.39
Grand Rapids & Indiana .....	1,736,574	00.962	00.972	00.961
Lake Shore & Michigan Southern .....	10,020,599	00.689	00.601	00.644
Michigan Central .....	6,299,948	00.904	00.559	00.726
Milwaukee, Lake Shore & Western .....	2,845,535	01.589	00.737	01.067

In the absence of complaints to the contrary, the conclusion is a just one that the freight rates charged the patrons of Michigan railroads are satisfactory, and maintained without discrimination or favor, in accordance with the requirements of our law. With this conviction, and in view of the very low average rate now collected for freight transportation, it would seem that additional legislation upon the subject is not required in the public interest.

COMMODITIES MOVED.

For classification of tonnage and commodities moved your attention is respectfully directed to Tabular statement No. 12 accompanying this report where will be found full details of the freight traffic upon Michigan roads during the year. It also shows the aggregate and per cent of each commodity carried and the freight forwarded from Michigan stations during the same period. The subjoined statement gives a comparative exhibit of the percentages of the different articles included in the table during the period of five years commencing with 1885. The variation from last year for the most part is hardly appreciable. Forest products show a slight increase from the previous report, while the movement of ores exhibits considerable diminution. Agricultural products generally and coal likewise, are in less tonnage than for the preceding year.

Statement.

Classes of Freight Carried.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	From 1887.	
	1885.	1886.	1887.	1888.	1889.	Per Cent. of Increase	Per Cent. of Decrease
1. Grain .....	15.21	12.63	9.35	9.33	8.56	-----	0.75
2. Flour .....	3.35	2.22	2.63	2.51	2.51	-----	-----
3. Provisions (beef, pork, lard, etc.) .....	2.31	2.97	2.55	2.15	2.44	-----	-----
4. Animals .....	4.22	3.93	3.17	3.18	3.20	.17	-----
5. Other agricultural products .....	3.94	5.05	2.71	5.49	3.21	-----	2.28
6. Lumber and forest products .....	18.73	19.34	22.87	20.07	22.04	1.97	-----
7. Coal .....	14.98	13.77	12.84	18.74	10.90	-----	2.84
8. Plaster .....	.65	.67	.69	.82	0.97	.15	-----
9. Salt .....	1.41	1.30	1.46	1.18	1.27	.09	-----
10. Petroleum and Charcoal .....	1.25	1.29	1.23	1.34	1.48	.14	-----
11. Railroad iron, iron and steel rails .....	.63	.82	1.34	.48	.49	.01	-----
12. Pig and bloom iron .....	1.07	1.12	1.25	1.09	1.30	.21	-----
13. Other iron and castings .....	1.66	1.97	1.87	1.72	1.94	-----	0.22
14. Ores .....	9.52	12.41	14.73	15.05	9.30	-----	5.75
15. Stone and brick .....	2.12	2.68	3.17	3.75	4.62	.87	-----
16. Manufactures—articles shipped from point of production .....	2.45	5.07	3.76	4.24	3.45	-----	.29
17. Merchandise and other articles not enumerated above .....	17.09	14.86	14.38	13.90	12.30	-----	1.60

MICHIGAN TONNAGE.

The movement of freight from Michigan stations is largely in excess of like tonnage during the previous year and is returned at 21,106,826 tons which was 39.51 per cent of the total tonnage and an increase of 3,059,650 tons or 16.95 per cent.

I continue the statement showing number of tons of freight moved one mile during the sixteen years since 1874 including that under report, and the average rate per ton per mile upon each year's movements.

STATEMENT OF TONNAGE AND RATE PER MILE SINCE 1873.

	Tons Carried One Mile.	Rate per Mile.
1874 .....	1,932,955,796	\$0 01.37
1875 .....	1,954,003,452	01.20
1876 .....	2,326,961,690	00.98
1877 .....	2,292,655,424	01.03
1878 .....	2,858,931,229	01.05
1879 .....	3,598,676,485	00.92
1880 .....	4,789,420,773	00.86
1881 .....	5,747,847,621	00.92
1882 .....	5,781,580,167	00.97
1883 .....	6,235,081,222	00.99
1884 .....	6,164,447,358	00.90
1885 .....	6,415,952,716	00.82
1886 .....	6,475,690,954	00.89
1887 .....	6,353,779,133	01.09
1888 .....	6,814,787,273	00.79
1889 .....	7,790,632,203	00.75

From the above it will be noticed that for 1889 the tonnage was the heaviest and the average rate the lowest in the history of the department.

## EQUIPMENT.

The estimated value of the equipments in use upon the railroads in this State is estimated at \$48,605,964 and \$3,301.59 per mile of road operated. This is an increase of \$7,883,259 and \$329.22 respectively. For the maintenance of the equipment, including, new cars and engines which in some instances are charged to maintenance account, there was expended as before stated the sum of \$10,321,906.23 or 21.23 per cent upon the estimated value of the rolling stock. Per mile of road operated it was \$701.12 and per train mile 14.45 cents. Few accidents have been reported by reason of poor and deficient rolling stock during the past year and the mechanical engineer reports it quite up to the standard of excellence generally in the past characteristic of our Michigan roads. Following is a list of the rolling stock reported at the close of the last year.

## LIST OF EQUIPMENTS, 1890.

Locomotives, all classes .....	3,107
Passenger cars, all classes .....	1,506
Baggage, mail, and express cars .....	623
Box freight cars .....	55,791
Stock cars .....	6,729
Platform and coal cars .....	27,092
Ore cars .....	10,505
Conductors' way cars .....	1,617
All other cars .....	2,169
<b>Total cars .....</b>	<b>109,139</b>

## AUTOMATIC CAR COUPLERS.

The car coupling question is in somewhat better shape than when the last report from this office was made. On March 1, 1890, a circular of inquiry was sent to railroad managers and superintendents, and to railroad men's organizations, generally, asking if there was any good reason why all the link and pin couplers should not be withdrawn from the approved list. The effect would be to leave for use couplers only of the Master Car Builders' type. Answers were generally received from the railroad officials and from many of the employes; the large majority of both classes favored the change outlined. The result was that on the twentieth day of May, 1890, an order was issued, a copy of which will be found among my official orders in the appendix to this report.

The magnitude of the undertaking is such that it will be impossible for the roads to literally comply with the law by the time it becomes operative January 1, 1891, and it should be amended so as to extend the time within which all cars should be equipped with automatic couplers three years at least. The extent of the task imposed by the law was such as to render a compliance with its provision an impossibility within the time named. At the time the law was executed very few had any adequate idea of the immensity of the work required. The great number of different kinds of couplers proposed and the diversity of opinion among railroad men as to what type of couplers is best, delayed any attempt to comply with the law because experience has demonstrated that the adoption of several

different types of couplers however good in themselves only add to the difficulty. This was shown by the experience with the seven kinds of couplers selected by my predecessor Hon. Wm. McPherson Jr. none of which proved of practical value. Had each of them been perfect of itself, the lack of uniformity would have prevented any good being gained by their adoption, yet Mr. McPherson called to his aid in making the selection, the leading practical railroad men of the State. The difficulty was, a demand for something human ingenuity had not yet devised means to supply.

One year ago it was reported by this department that the question was as far from settlement as ever; yet as the result of the action of March 1, and May 20 ult. it is hoped we see the beginning of the end of this tedious but important question, though there are yet many difficulties to be overcome which develop almost every day. The provision requiring new cars purchased or leased, and cars of modern make and size when sent to the shops for general repairs, or for repair of coupling fixtures may be very properly enforced. There is a class of cars belonging to foreign corporations which have long buffers extending both above and below the draw bars, that run to some extent on nearly all the railroads in this State, which are especially dangerous to couple unless equipped with automatic couplers, which should not be allowed to be in service in Michigan a single day longer than is absolutely necessary. The railroad companies have been especially notified that it will be unlawful to use them in this State after January 1, 1891. There may be reasons why a limited extension should be granted but the time should be as short as is consistent with the circumstances. Several of the leading roads have made commendable progress in equipping their cars with safety couplers during the last eight months, a detailed report of which will be found in the report of the Mechanical Engineer in the appendix.

#### POWER BRAKES.

Power brakes are rapidly coming into use on all trunk lines of road. The law of 1889 requiring power brakes on engines has not been fully complied with, but all companies are equipping their engines as fast as possible and all new engines are built with them on. The increased speed at which freight trains are now run makes it imperative that some means should be provided for power brakes on freight trains.

If all engines used for handling freight except yard engines were provided with an air pump there are now so many cars with the air brake attachments that sufficient number of cars can in nearly every case be found and placed at the front of the train to control it. This is now the practice on most of the trunk lines, but legislation will be found necessary to compel some of the companies to adopt this system. In the near future it should be required that *companies* equip all new freight cars with air brake attachments. This is now being done upon many of the leading roads, and legislation to that end should be enacted.

#### SAFETY HEATERS.

Owing to the mild weather of last winter there has not been as much improvement in this respect as could be desired. No method or device has yet received the formal approval of this office though there are some

systems in use, the approval of which it might not be unreasonable to ask on the part of the companies which have adopted them. The policy of the department has been to require the more dangerous class of stoves and heaters removed, especially on trains which run at a high rate of speed and at the same time urging the companies to be satisfied with nothing short of the best. Some form of heating by steam taken from the locomotive promises to be the popular method of heating cars, but in order to determine the efficiency of the appliances for this purpose colder weather than has been experienced during the past two winters is necessary. To be safe in our Michigan climate emergency heaters should be placed in every car, to be used, when for any reason the locomotive is disabled.

#### PERMANENT WAY.

Work upon the way, has been active during the year, and the tracks, buildings, bridges and other structures are reported as generally in good condition of repair.

The amount expended for maintenance of way during the period under report was \$13,325,210.77 which was \$905.08 per mile of track operated, and \$0.18.67 for each train mile run being in excess of like expenditures for preceding year of \$158.04 and \$0.00.35 respectively.

#### BUILDINGS.

As a rule the buildings first erected by our railroad companies for station use were of a comparatively cheap and temporary character. No general renewal of these structures has as yet been commenced, and as a consequence, many of them have long since become illsuited or entirely inadequate to the purpose for which designed, and ought, both for the convenience of the railroad service, and in the interest of the public, to be replaced with buildings of modern style and arrangement. But whenever one of these ancient shells become no longer habitable, I am pleased to say that the companies in most instances in rebuilding, evince a good taste and liberality that is alike a credit to themselves and an ornament to the town for which the new structures are provided. During the year the Michigan Central Railroad Company has completed commodious and elegant passenger stations at Bay City and North Saginaw and have laid the foundations for another at Niles which has been greatly needed for many years. The Grand Rapids and Indiana Railroad Company has erected a large and handsome fireproof passenger car shed for the use of its own and the several companies using the passenger depot at Grand Rapids. It is understood that the old wooden building so long in use at that point for waiting room and offices will in the near future give way to a substantial and elegant edifice of modern design, which when completed, in connection with the shed erected this season, will furnish comfort and convenience to the public not excelled in the State.

The Toledo, Ann Arbor and North Michigan Company has also completed and occupied during the year a very handsome and well arranged passenger house at Ann Arbor, and thus filled a long felt want at the University town.

At Detroit, the Fort Street Union Depot Company has been making substantial progress toward the erection of its new passenger station. The ground for its site has been secured, the right of way for the

approaches been provided for, and plans for its buildings, which are to be in every way models of good architecture and convenience as well as of massive proportions have been adopted, and the work will be pushed to the earliest possible completion.

In this connection it may not be out of place to suggest that the passenger stations of the Central and Grand Trunk Companies at Lansing, although recently treated to fresh coats of paint and other repairs, are still old, small and uncomfortable, and should if possible be replaced with structures suitable and sufficient to the needs of the Capital City, and the large traffic which it furnishes these roads, and that will compare favorably with its other public buildings as well.

#### TRACK SECTIONS.

The track sections number 1,210 of an average length of 5.58 miles worked by gangs of 4.21 men to each section. The small number of derailments and other track accidents reported best prove the efficiency of the track force.

#### TRACK RENEWALS.

##### RAILS.

59,981 tons of new rail relaying 775.95 miles were placed in the tracks during the year under report being about 11.50 per cent of the entire trackage of the State.

##### TIES.

The entire number of ties expended during 1889 was 4,792,495 of which 2,384,036, or 49.75 per cent were laid in Michigan.

##### TRESTLES.

More than one and one-sixth of a mile of trestle has permanently disappeared from sight and been replaced with earthwork during the past year. No better economy can be practiced than liberal expenditures each year for the substitution of earth in place of trestle until these objectionable and inferior structures are eliminated from our railroad properties.

##### CULVERTS.

The total number of timber culverts removed during the year was 338. Of these 99 were replaced with iron pipe, 56 with inch sewer pipe, and 183 were rebuilt of timber. I have to renew the suggestion made in my last report that in view of the fact that pipe of sufficiently large dimensions can now be had at a number of points in the State, available for nearly all requirements, the renewal of culverts with timber is of doubtful economy.

##### BRIDGES.

There were 304,129 lineal feet or about 57 miles of bridges reported upon the railroads of this State at the close of the last year, a slight decrease from the previous report. The average length of the bridges was 99 feet and there was one bridge to each 2.20 miles of track owned.

Following is a statement showing the character and extent of the bridge system covered by this report.

*Descriptive List of Railroad Bridges in Michigan.*

Character and Material of Bridge.	Number.	Length— Feet.
Wood.....	560	51,452
Stone or Iron.....	161	19,308
Combination.....	38	8,878
Trestles.....	2,283	280,745
Draw bridges.....	27	3,361
Totals.....	3,064	304,129

There structures have been frequently inspected under the supervision of this department and I have at all times been seconded by the management of the roads in my desire to maintain them in a condition of effective safety. Our efforts in that direction have been successful and no bridge accident has occurred upon the railroads of the State during the year. A record that speaks well for the care and watchfulness of the engineers and other officials in charge, and which doubtless in view of the terrible disasters resulting from weak railroad bridges in neighboring States within a recent period, will be appreciated by our traveling public.

NEW BRIDGES.

The foregoing list includes 82 new bridges erected during the year. 9,501 feet in lineal length and classified as follows:

Wood, number.....	41; feet in length.....	5,400
Iron or Stone, number.....	12; feet in length.....	1,860
Combination.....	2; feet in length.....	} 2,241
Unclassified.....	27; feet in length.....	
	82	9,501

As a rule the new bridge structures are of a far more permanent and substantial character than the old, and their construction is not only an important factor in connection with safe and efficient operation but is in the interest of true economy as well. Complete descriptive lists of all bridges, exhibiting their character and condition continue to be required in the office immediately after each spring inspection by the officials in charge, and have proven of great assistance in our supervision of this important class of structures.

CATTLE GUARDS.

Under the provisions of Act No. 165, laws of 1889, upon the application of J. D. Hawks, Chief Engineer of the Michigan Central Railroad Company, the National cattle guard has been approved for use in this State. This guard is made of three steel bars of two different widths alternated, set edgewise and securely fastened together in sections and then spiked to the ties. After its approval it was demonstrated that in at least one case



horses went over it with impunity. But after a careful investigation the stock was considered as unruly. The advantages of the guard were so manifestly in the interest of general safety, that it was believed that it was wise to permit its use even if in exceptional cases stock did cross it, and to treat such cases precisely as though stock had jumped over, or broken down a legal fence. As no pit is needed for this guard it avoids the danger of supports breaking down and striking stock which had fallen into them, being struck by the engine, and also the wrecking of trains by a derailed wheel dropping into them and the danger of wrecking a train by a derailed wheel dropping into them. All things considered, therefore, it is still deemed wise to permit and encourage their use in lieu of the pit guard heretofore in use. There are other kinds of surface guards which might properly be placed in the approved list.

#### CROSSINGS.

##### RAILROAD.

With the increased mileage of our roads these exposed points continue to increase and but for the improved appliances now being adopted for their protection against danger from collisions of the trains upon opposite roads would be a constant menace to the safety of the travelling public and company employes. The number of these crossings reported at the close of the last year was 331, which probably should have been 332, or 166 crossings common to two roads each reporting the same. Of these 150, were crossings at grade and 32 over and under the tracks of the crosswise roads. In the approval of maps of new roads involving the crossings of other tracks already in operation the rule of the statute requiring over or under crossings has been insisted upon when practicable without great hardship for the new road. But in a comparatively level country like Michigan where railroad construction seeks alluvial districts as far as possible it does not frequently happen that an overhead crossing can be effected without too great expense to the new company or the impairment of depot facilities at junction points.

#### INTERLOCKING SWITCHES.

There are now sixty-five interlocking switches in operation and five more under process of construction at railroad crossings in this State. They are daily growing in favor among railroad men of all classes. They expedite the movement of trains, save much expense from frequent stoppages and at times enable heavier trains to be moved because they are not required to be brought to a full stop at a certain distance from the crossing of some other road. They also provide entire immunity from collisions at the intersection of one road by another. It is now the practice to require all new crossings at grade to be protected by an interlocking switch and signal device. Several existing crossings have been thus protected within the last year with the free assent of one or both the companies in interest.

A system of daily inspection has been provided for, and results recorded by some employes of the companies in interest designated for that duty and a monthly report to this office required. In addition to this requirement

frequent inspections have been made at irregular intervals by the mechanical engineer of this department.

The result of this system of inspection has fully justified the wisdom of it and has undoubtedly prevented many accidents that otherwise might have occurred. While these devices furnish almost absolute immunity from collision with trains on other roads, they do not furnish anything like absolute protection against derailment except that they be left in perfect order and are properly operated. If proper provision is made for keeping a derailed train on the ties or turned on to an unobstructed side track there is very little danger of any serious results from a derailment unless trains are running at a very high rate of speed. Too much care cannot be exercised in putting them in, or in their operation afterwards. While trains are permitted to cross them without first being brought to a full stop, their speed should always be reduced to a moderate rate while passing the crossing.

Crossing diamonds are now being manufactured that give the advantages of a continuous rail at the crossing of one railroad by another thus saving the wear and tear of cars and crossing frogs and largely increased expense incidental to the old plan. These improved appliances should be required upon all heavy traffic roads having frequent crossings and are especially desirable when interlocking switches are in use, and are passed at a much higher rate of speed than when trains are first brought to a full stop.

#### SPLIT OR SAFETY SWITCHES.

These switches are a recent invention and reduce the danger of derailment at least one half, besides furnishing one solid rail at all times and a much smoother track. These switches should be required at all points where a side track leaves the main line and especially where trains are to pass at full speed. They are no more expensive than the common switch and are now generally adopted in new construction.

#### SIGNALS.

There are so many opinions in regard to signals at switches and other points that anything said about them is almost certain to interfere with some one's pet theory, but it is safe to say that the following general rules should be observed. Red is almost universally used to indicate danger and to stop, and it should be used for no other purpose whatever. All signals should be positive and a switch signal should show a different shape as well as color when turned for the main track or siding as the case may be. There are various opinions as to whether white or green should be used to denote safety and the practice is not uniform, though on the majority of roads white denotes safety, and green caution. There are some who advocate a compound light. But this department although authorized to do so has never taken the responsibility of presenting a uniform system of signals. Owing to the variety of practices of the different companies whose roads are operated in other states as well as this the task is one very few men would be willing to undertake after realizing the difficulties involved.

## BLOCK SIGNALS.

The increased number of trains now run on the main trunk lines and the increased speed at which they are moved has caused a demand for some means of showing how far in advance the preceding trains may be so that an engineer need not reduce his speed and lose time and incur the danger of being run into by the train following, nor of overtaking the train which is preceding him. Some of the companies have adopted time signals at stations showing at what time the last train passed but on some of the roads it frequently happens that two or three trains are between two stations at the same time. There has been invented by Mr. Fontaine of Toledo a very ingenious device for the purpose of indicating the interval between train movements, which is now being tested by the Michigan Central Railroad Company. It is a clock work device which sets by the side of the track showing on a plain white face a black hand similar to that of a clock which is so arranged that a train passing it sets the hand at zero; the clock work then runs for fifteen minutes unless a second train comes along in less time and again sets it to zero. An engineer approaching can see by the hand just how long since a train passed or will know that it has been gone fifteen minutes or more. It is yet too early to certainly state whether this device will prove all right or not but in case it proves to be what its inventor claims for it, it can on busy roads be used for mile posts and on curves to great advantage. In case of an accident to a train requiring it to stop, a brakeman may go back, and when called in, set the signal to zero or danger thus warning the engineer of the train following; but there is no means by which the signal can be set to safety by evil disposed or careless persons when it should be at danger.

## HIGHWAY AND STREET CROSSINGS.

The number of these exposed points has increased 618 since our last report was issued, being now 6,832; of these 6,630 were at grade and 202 over or under the public thoroughfares; 349 only were protected by gates, flagmen and signals, and the wonder is that there were not more, rather than less, casualties occurring at these fruitful places of danger. It is not difficult to provide protection for this class of crossings in cities and towns contiguous to stations, but in the country where some of the most dangerous are located, being remote and difficult of supervision, it is a serious question how the peril incident to them is to be obviated, except by separation of grade, to legislation for which purpose I allude under another head of this report.

## RESIDENCE CROSSINGS.

The law of 1889 providing for cattle guards and an unobstructed passage across the track of any railroad when the track passes between any residence and the public highway, has been declared unconstitutional by our supreme court on the grounds that it was taking private property without providing for compensation. It seems unfortunate that the court felt compelled to find thus, as it inflicts a great hardship to parties thus situated and adds to the danger, not only of the person crossing with a team to be compelled to open and shut gates, but to

the train as well, on account of the greater exposure to collision from the additional time required by a team to cross the intervening track.

#### FARM CROSSINGS.

The commissioner of railroads should be permitted to order cattle guards at farm crossings in certain cases. When stock in considerable numbers is to be frequently driven across the track where there are no cattle guards or connecting fences it is almost impossible for one man to prevent it from scattering and feeding upon the railroad land and obstructing the track. This is very annoying to the farmer as it endangers his stock, as well as passing trains, which are liable at any moment to come upon the animals before they can be driven away. I am led to make this recommendation on account of the adoption of a surface guard described elsewhere which does not require a pit in the track nor in any way endanger a train or train men.

#### FENCES.

But little additional fencing has been done during the past year there being completed at the close of the last year 8,970 miles leaving 2,308.11 miles, most of it in the more northern and timbered sections yet to be built. The new fence law is generally satisfactory to both farmers and the companies so far as the kind of fence is definitely prescribed by law or approved by the Commissioner of Railroads. Few complaints have been received in relation to fences and it has only required the calling the attention of the proper officer of the road to the complaint to have the cause of it removed except in one or two instances when the companies desired to abandon that portion of the road which it was desired to have fenced.

The law should provide for an earlier completion of the right of way fence of a new railroad running through improved farms. It is not uncommon for the building of a railroad to be commenced early in the summer tearing down the farmer's fences, digging up his fields in grading and the right of way fences not built until late the following season, and in some instances the fences are left down for the third season. Quite frequently farmers have sold their stock because they had no means to control and care for them. The damage amounts to a very large percentage of the receipts of the farm each year, and an amount of annoyance and inconvenience that can only be appreciated when experienced.

While the expense of fencing would be greater to the railroad company to fence before grading commenced than afterward, yet when it goes through improved fields it would not be as great an injustice to railroad companies to require the right of way fences to be built before any grading is done, as it is now, to farmers to be deprived of the use of their farms for months after the roads are completed and in full operation.

#### STATIONS AND EMPLOYEES.

The whole number of stations reported was 3,058 an increase of 316 from last year. Of these 1,435 were located in Michigan being 50 in

excess of the previous report and averaging one station for each 4½ miles of track. Occasional complaints of lack of depot facilities in the more sparsely settled districts of the State have reached this office during the past year. These have been looked into and when they seemed to be well founded steps have been taken to have the cause of complaint removed. It is manifestly so conducive to company interests that every encouragement should be given to the development of business along the line of road that managers rarely fail to respond favorably to any reasonable request made by the patrons for better conveniences for facilitating traffic.

The railroad companies doing business in the State had in their employ during the year 60,531 men of whom 24,105, 39 per cent, were enrolled in Michigan, an increase of 1,153 from the preceding year. The strikes which took place among train men at eastern points during the year and for a time threatened serious disturbance of railroad traffic did not extend into Michigan and the State has been happily free from disturbance among the labor classes the entire year. We have no accidents reported as the result of intemperate employes and it is believed that the personnel of the force employed on Michigan railroads will compare favorably with that of any other in the country. We have had no complaints from citizens of violence or other illegal act on the part of employes and it gives me pleasure to add that a disposition has everywhere and all times been manifested so far as this office has been informed to yield a strict compliance with the laws enacted for their government by the legislature. I subjoin statement showing the classification of employes upon Michigan railroads during the year under report.

*Statement showing Classification of employes on Michigan Railroads, December 31, 1889.*

Classes.	Number.
Baggagemen.....	773
Brakemen.....	3,938
Conductors.....	1,992
Engineers.....	2,315
Firemen.....	3,196
Laborers.....	15,895
Shopmen.....	8,438
Yardmen.....	3,274
Others.....	19,536
Not classified.....	780
Total number.....	60,531

#### ACCIDENTS.

The total number of accidents reported during the year 1889 was 572. For the previous year 532, an increase of 40. This was one accident for each 124,787 miles run as against one for each 119,041 miles run as by the preceding report. So that the number of accidents though numerically greater were proportionately less.

The total number of fatal accidents occurring was 178 an increase of 18 over 1888. The accidents not resulting in death, but involving

different degrees of personal injury of a serious character were reported at 394, an increase of 29 from the previous year. The following classified statement shows the number and character of persons killed and injured on Michigan railroads during the year under report.

*General Casualty Statement, 1889.*

Persons.	Killed No.	Injured No.
Passengers.....	8	26
Employees.....	60	232
Others.....	110	86
Total.....	178	394

Of the above 117 are reported as having been clearly accidental the remaining 455 resulting from lack of caution and the persistent habit of trespassing upon track and trains. 97 trespassers or tramps were killed and injured. 28 intoxicated people and 3 suicides figure in the casualty reports for the year.

The following is a comparative analysis of the number and causes of accident for 1888 and 1889.

*Casualties and Causes, 1889.*

Causes.	Killed.				Injured.				1888.	
	Passen- gers.	Em- ployés.	Others.	Total.	Passen- gers.	Em- ployés.	Others.	Total.	Killed.	Injured.
Collisions.....		2		2	3	8		11		2
Coupling cars.....		7		7		152		152	10	144
Derailments.....	3	8		6	12	9	1	21	4	21
Falling from trains.....		17		17	6	23	2	31	18	29
Frogs.....		2		2		1		1		
Getting on and off trains.....	4	5	2	11	5	7	13	25	10	20
At highway crossings.....			24	24			20	20	19	22
Miscellaneous causes.....	1	20	4	25		79	11	88	35	65
Overhead obstructions.....		8		8		2		2		1
Trespassers on trains.....			11	11			9	9	11	31
Trespassers on tracks.....		1	69	70		1	30	31	53	80
Total.....	8	60	110	178	26	232	86	394	160	365

COLLISIONS.

Accidents from this cause continue to be rare, there being no increase from the previous year. During the present year 1890, however, there have been a number of accidents from this cause reported with large destruction of property the result I regret to add either of carelessness on the part of train men or imperfect appliances.

## COUPLING CARS.

This continues to be the most prolific cause of injury to employes and the accidents continue to increase notwithstanding many of the cars are now equipped with vertical plane couplers which do not require the men to go between the cars to make a coupling. It is possible however if not probable that the difficulty of coupling the old fashioned drawbar to the improved variety may have much to do with the increase of accidents from this cause, and that when all the cars are equipped so that they readily couple automatically we may expect this class of accidents to largely disappear.

## DERAILMENTS.

Frequent accidents continue from this cause, six persons having been killed and 21 injured during the year. These accidents have resulted almost entirely from imperfect switches and it is hoped with the adoption of improved appliances to which I have alluded elsewhere, derailments will be of rare occurrence.

## HIGHWAY COLLISIONS.

Twenty-four persons were killed and 21 injured at highway and street crossings the last year, a pitiable record that the closest watchfulness and frequent inspections of exposed points and official action for their protection have not availed to prevent. Separation of grades wherever practicable seems to be the only sure remedy for this class of accidents.

## FALLING FROM TRAINS.

This class of casualties is confined largely to employes, 20 of whom were killed and 23 injured the past year. Six passengers and two others were also injured from this cause.

## FROGS.

We have to report two employes killed from this cause during the year. Investigation revealed the fact that in each instance the frogs were not blocked according to law. No accidents of this character have occurred since the passage of our law, where its humane provisions have been complied with in letter and spirit.

## GETTING OFF AND ON TRAINS.

Four passengers, five employes, and two others were killed and five passengers, six employes and fourteen others injured by reason of their own lack of caution in attempting to board or leave trains while in motion. The provisions of the statute intended to deter people from this perilous practice have proved generally a dead letter, no attempt seemingly having been made to enforce them.

## TRESPASSERS ON TRAINS AND TRACKS.

There is no abatement of the deaths and injury resulting from this cause, 81 of the above class having been killed and 39 injured during the year. I am aware that the general sentiment prevails that the class of people usually involved in these accidents is hardly worth protection. But it should not be forgotten that this habit of trespassing upon railroad tracks is rapidly gaining upon our local population, many of whom come to a terrible death upon the same level as the most worthless tramp, and whom wise legislation judiciously enforced would very frequently save. I desire through you to commend this subject to the thoughtful consideration of our next legislature. Other States are passing laws to inhibit this practice. In Europe it is a fine for a person to cross the tracks of a railroad at its grade line at other places than at a regular station, where over or under protection is generally afforded, and it seems hardly consistent with good government that Michigan should longer permit its railroad tracks to be used as a highway for footmen.

I hereby submit a classified statement of the employes killed and injured on Michigan roads during the year.

*Statement.*

Baggagemen.....	3
Brakemen.....	146
Conductors.....	21
Engineers.....	17
Firemen.....	28
Laborers.....	39
Shopmen.....	11
Yardmen.....	60
Unclassified.....	82
Total .....	407

Your attention is respectfully directed to tabular statement 17 A, B and C at pages 690 to 701 inclusive of this report for full details and analysis by companies of the statistics bearing upon this important topic.

## TAXATION.

The total amount realized to the State Treasury from the specific taxations of railroad companies for the fiscal year ending Dec. 31, 1889, and payable July 1, 1890 was \$757,234.94, which was an increase upon the amount of the previous year of \$4,510,640 or 6.33 per cent. Of this amount, \$219,771.78 assessed by the Auditor General upon their stock and debt in accordance with the provisions of their special charters, was paid by the following companies:



COMMISSIONER OF RAILROADS.

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Detroit Grand Haven & Milwaukee.....	\$25,171 40
Lake Shore & Michigan Southern.....	45,583 18
Michigan Central.....	134,083 20
Grand River Valley.....	14,934 00
Total.....	\$219,771 78

The remainder, \$537,463.16, was computed by the Commissioner of Railroads as required by the provisions of the general railroad laws upon the gross earnings of the several companies as ascertained at his office, and certified by him to the Auditor General who levied the tax and certified the amount due, to the several companies who pay the sum directly to the State Treasurer.

The total track mileage of the State as ascertained for purposes of taxation was 6,668.59 and if all the companies were taxed under the provisions of the general railroad law the following would be the result of the computation.

Gross receipts.....	\$34,540,908 59
Taxable means per mile of road.....	5,187 42
Rate per cent of tax on income, average.....	2 19
Taxes per mile of road, average.....	113 52

The special chartered roads with the exception of the Lake Shore and Michigan Southern for several years past have been subject to heavier taxation under their charters than they would if taxed under the general law. The Lake Shore & Michigan Southern had it been taxed under the general law instead of the special charter would have paid for the year 1889, \$94,495.33 being in excess of the amount it did pay \$47,751.72.

The question of railroad taxation is an important one. While it may be reasonably questioned whether the railroads of Michigan are bearing quite their fair share of the public burdens, the taxes have been collected without protest from the companies and practically without expense to the State—the existing machinery of the State Government being sufficient for that purpose without additional provisions being necessary.

There was collected last year the sum of \$757,234.94, which, together with other specific taxes, amounted to \$821,333.87, was distributed to the several counties in proportion to their school age, as shown by the following table, which also shows the amount of State tax levied upon the property of each county.

*Apportionment of the Primary School Money during the year ending June 30, 1890.*

Counties.	Amount.	Counties.	Amount.
Alcona.....	\$1,862 92	Lake.....	\$2,672 78
Alger.....	291 10	Lapeer.....	12,978 10
Allegan.....	16,315 35	Leelanaw.....	2,424 50
Alpena.....	6,298 44	Lenawee.....	18,080 02
Antrim.....	4,027 60	Livingston.....	8,127 00
Arenac.....	2,154 74	Luce.....	515 70
Baraga.....	1,166 48	Mackinac.....	2,381 28
Barry.....	9,974 70	Macomb.....	12,873 38
Bay.....	22,200 44	Manistee.....	9,274 83
Benzie.....	2,128 06	Manitou.....	518 46
Berrien.....	16,228 58	Marquette.....	12,761 90
Branch.....	9,920 68	Mason.....	6,227 84
Calhoun.....	15,973 20	Meosta.....	8,866 54
Cass.....	7,835 14	Menominee.....	2,802 34
Charlevoix.....	4,004 60	Midland.....	4,297 98
Cheboygan.....	4,586 76	Missaukee.....	1,498 34
Chippewa.....	4,077 68	Monroe.....	14,994 83
Clare.....	2,549 08	Montcalm.....	13,751 20
Clinton.....	10,994 66	Montmorency.....	460 84
Crawford.....	918 62	Muskegon.....	17,644 42
Delta.....	5,074 98	Newaygo.....	7,898 28
Eaton.....	12,540 66	Oakland.....	14,253 84
Emmet.....	2,160 06	Oceana.....	6,420 20
Genesee.....	15,173 20	Ogemaw.....	1,760 13
Gladwin.....	998 94	Ontonagon.....	1,074 46
Gogebic.....	2,396 02	Oscoda.....	6,459 00
Grand Traverse.....	5,012 36	Oscoda.....	544 26
Gratiot.....	12,115 09	Otsego.....	1,656 62
Hillsdale.....	11,410 80	Ottawa.....	16,419 58
Houghton.....	14,076 84	Presque Isle.....	1,871 84
Huron.....	13,770 90	Rosecommon.....	558 90
Ingham.....	13,871 04	Saginaw.....	34,999 56
Ionia.....	12,685 54	Sanilac.....	15,466 64
Iosco.....	5,290 82	Schoolcraft.....	1,161 64
Iron.....	1,179 54	Shiawassee.....	11,782 16
Isabella.....	7,849 00	St. Clair.....	22,449 82
Ile Royal.....	16,416 26	St. Joseph.....	9,438 54
Jackson.....	14,608 88	Tuscola.....	14,089 09
Kalamazoo.....	2,015 24	Van Buren.....	12,107 60
Kalkaska.....	38,715 78	Washtenaw.....	16,861 46
Kent.....	1,266 46	Wayne.....	104,351 48
Keweenaw.....		Wexford.....	4,178 66
Total.....		\$821,833 87	

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*Apportionment of State Tax, September 25, 1890.*

Counties.	Aggregate of State Taxes Apportioned.	Counties.	Aggregate of State Taxes Apportioned.
Alcona.....	\$3,341 65	Lake.....	\$2,678 23
Alger.....	3,841 65	Lapeer.....	13,044 89
Allegan.....	30,049 88	Leelanaw.....	1,386 66
Alpena.....	4,678 81	Lenawee.....	\$7,426 44
Antrim.....	4,844 14	Livingston.....	30,049 88
Arenac.....	1,670 82	Luce.....	
Baraga.....	2,004 99	Mackinac.....	3,841 65
Barry.....	17,876 56	Macomb.....	22,054 87
Bay.....	29,406 49	Manistee.....	8,856 61
Benzie.....	2,004 99	Manitou.....	133 67
Berrien.....	22,723 20	Marquette.....	20,049 88
Branch.....	23,391 53	Mason.....	5,346 63
Calhoun.....	\$7,426 44	Mecosta.....	8,019 96
Cass.....	20,049 88	Menominee.....	8,854 12
Charlevoix.....	3,841 65	Midland.....	3,841 65
Cheboygan.....	4,678 81	Missaukee.....	4,844 14
Chippewa.....	4,678 81	Monroe.....	20,049 88
Clare.....	4,678 81	Montcalm.....	12,698 86
Clinton.....	22,723 20	Montmorency.....	1,670 82
Crawford.....	2,339 15	Muskegon.....	14,708 25
Delta.....	4,678 81	Newaygo.....	6,849 13
Easton.....	23,391 53	Oakland.....	20,039 78
Emmet.....	2,673 32	Oceana.....	5,346 63
Genesee.....	29,406 49	Ogemaw.....	2,004 99
Gladwin.....	1,970 82	Ontonagon (Act 88, '89).....	2,506 22
Gogebio.....	2,506 23	Oscoda.....	5,012 47
Grand Traverse.....	5,346 63	Oscoda.....	1,836 66
Grafton.....	12,698 86	Otego.....	2,673 32
Hillsdale.....	25,069 58	Ottawa.....	17,376 54
Houghton.....	8,698 26	Presque Isle.....	1,670 82
Huron.....	8,688 26	Roscommon.....	2,204 99
Ingham.....	24,723 19	Saginaw.....	44,100 74
Ironia.....	22,723 20	Sanilac.....	10,024 94
Iosco.....	2,673 32	Schoolcraft.....	4,009 96
Iron.....	8,349 13	Shiawassee.....	20,049 88
Isabella.....	6,014 96	St. Clair.....	22,054 87
Ile Royal.....	133 67	St. Joseph.....	24,069 86
Jackson.....	41,436 42	Tuscola.....	13,866 59
Kalamazoo.....	\$2,079 81	Van Buren.....	18,713 22
Kalkaska.....	5,012 47	Washtenaw.....	40,099 76
Kent.....	60,149 64	Wayne.....	200,498 81
Keweenaw.....	8,675 81	Wexford.....	4,844 14
Total.....		Total.....	\$1,263,744 00

This system has so far proved a good one, and the primary schools, which are the only schools of the great mass of our people, have had the income derived from this source. As shown by the table above, some of the newer counties receive much more in primary school money than they pay into the State treasury in direct State tax. However, some modification of our method of computing taxes is necessary. The present law provides for a tax upon gross earnings, and also that on "railroads lying partly within and partly without the State there shall be paid such portion of the tax herein imposed as the length of the operated road lying within this State bears to the whole length of the operated portion thereof."

The United States Courts as well as a number of the State Supreme, Courts, have recently decided that in taxing on gross receipts only those

receipts can be taxed which are earned on business done wholly within the State; that taxing earnings derived from the transportation of freight or passengers through the State, or from a point within the State to a point without the State, or from a point without to a point within, is an interference with commerce between the States and a violation of the United States constitution. One case now pending against the St. Paul, Minneapolis & Sault Ste. Marie Railroad Company involves this question and in case it should finally reach the United States Supreme Court it will undoubtedly be decided against the State.

Substantially the same results can be reached by providing for a board to determine the value of each railroad per mile including its equipments, and the gross earnings can be the basis of ascertaining the valuation of the properties for purpose of taxation. The Legislature can then fix the rate per cent which the roads shall pay into the State treasury and the same means utilized for the collection of the tax as are now employed. The Commissioner of Railroads, Secretary of State and Attorney General, now compose a board for the approval of maps of proposed railroads and crossings and for the approval of proposed consolidation of one railroad with another, and would be an appropriate board to determine the valuation of our railroads for the purpose of taxation. It is hoped that the attention of the Legislature will be called to this important matter, so that appropriate legislation may be had before the State is involved in litigation and loss to our primary schools incident to judgments adverse to the State occurs.

#### THE SPECIAL CHARTERED RAILROADS.

The railroads operating under special charters granted before the present constitution of the State was adopted have for some years attracted the attention of the Legislature, because general laws enacted for the government of railroads did not reach this class of roads. They have, however, recognized the police laws of the State and the competition of other roads has to a considerable extent regulated the charges for doing business on the specially chartered. On all but one of these roads the amount paid in taxes under the special charters for some years past has been equal to, or exceeded the amount they would have paid under the general law, so that no systematic effort has been made to determine the charters. There is, however, little doubt that in the near future some legal or equitable means will be found to place all the railroads in the State on precisely the same footing as regards the law governing their operation and the proportion of taxes they will be required to pay for the support of the government. Unlike the other chartered railroads, the Lake Shore & Michigan Southern Railway does escape a very large proportion of the taxes which it would be required to pay under the general law. The amount which our school fund is deprived by reason of this charter amounts now to the sum of over \$40,000 per annum. Believing that there must be some legal manner by which this corporation can be compelled to bear its fair share of the public burdens, eminent counsel has been employed to carefully examine the legal status of the company and give their opinion as to what is necessary to be done to accomplish this object. The firm of Atkinson, Carpenter, Brooks & Hough, who

had presented the people's case brought to test the validity of the passenger fare law of 1889 in a very satisfactory manner before the Supreme Court, were employed to do this work, but before they had concluded their research, Col. Atkinson was called away and ex-Judge Marston was taken into the case. The opinion will be found in the appendix to this report, as well as the draft of bills which, in their opinion, if enacted into a law would accomplish the purpose desired. This opinion has received the careful consideration of the Attorney General and is endorsed by him. It is hoped the Legislature will give this matter the attention which its importance demands.

#### LEGISLATION.

##### RECOMMENDED ON DIFFERENT SUBJECTS.

The laws of 1887, Act No. 236, provide for the approval of the map of a proposed railroad by a board consisting of the Commissioner of Railroads, Attorney General and Secretary of State. When the proposed railroad crosses the track of an existing railroad, provision is made for giving notice to the General Manager or General Superintendent of the existing road at least ten days before the time appointed for a hearing, but no provision is made for giving notice to private parties or municipal authorities whose interests are to be affected by the building of the proposed road. Justice to the interests of the people demand that some provision be made either by publication or in case of residents, the serving of a personal notice on those whose property is to be taken, that they may have an opportunity to be heard before the map is approved. Municipalities should also be notified that they may appear and be heard in relation to the method of crossing streets and highways. The great number of fatal accidents occurring at grade crossings makes the necessity of providing, wherever practicable, for some crossing rather than at grade imperative. It is to be hoped that some provision will be made for the gradual abolition of all street and highway crossings of railroads at grade. Massachusetts has such a law providing that the railroad companies, the township or city, and the State each contribute to the necessary expense. The argument for such policy is found in this volume showing the number of people killed and injured at street crossings. The law now gives the commissioner of railroads authority to order a bridge wherever in his judgment the safety of the public requires it, and this power has been sustained by the Supreme court in the Fort Street Union Depot case, but there is no provision for condemning the property in front of or adjacent to the approaches to such bridge, nor is there any law to determine what the damages are or by whom they shall be paid. The law should plainly direct how the damages are to be ascertained and who is to pay them, or at least provide a proper tribunal to determine these questions. In most places when bridges are required the adjacent property is valuable and should be protected and at the same time means provided whereby the safety of the public can be secured.

The number of street car tracks now being built across railroad tracks at grade and the danger to which people are exposed at these crossings demand that some competent tribunal should determine under what conditions these crossings should be made. In this connection also should be considered the question of the height of electric wires above

railroad tracks. So numerous are the purposes for which electricity is now utilized, almost innumerable wires are being strained across the railroad tracks. To be safe for brakemen standing on the highest cars now in use any obstruction must be twenty-two feet in height above the rail. During the present season several wires have been strung across the tracks of different railroads for the purpose of furnishing power for the propulsion of street cars. They were at first erected at a height of eighteen feet and as the wires were sagged by the effect of the heat, they were in some instances considerably lower. In addition to the danger of knocking men off the cars these wires carry a strong electric current. So great was the danger to train men that an order was issued under the general powers conferred by law on the Commissioner of Railroads to raise the wires to a height of twenty-four feet. The two feet in addition to the height required for a bridge or other permanent structure was required for the two-fold reason that the wire is not rigid and that it is charged with an electric current sufficiently strong to be dangerous. The officers of the street car companies claimed that twenty-four feet was higher than their trolleys could be made to work. After considerable negotiation they were raised to twenty-two feet and securely fastened. While this is not as high as safety requires it seemed to be the best that could be done under the circumstances and the matter was permitted to rest. The law should regulate the height of all wires over railroad tracks and they should be permitted to be put up only in such a manner as to be secure, this to be determined by inspection by competent authority. Provisions should also be made for the crossing of railroads by the tracks of street railroads and provide what safety appliances should be erected for the protection of passengers on the respective roads. Gates can be erected and so interlocked with a rail on the street railroad that it will be impossible for a street car to get on to the track of the steam railroad when the gates are lowered across the street.

#### CONCLUSION.

In conclusion it is proper to say that the numerous recommendations made are those believed to be needed and just to all interests, after four years experience in the important position of Commissioner of Railroads. It is not expected the Legislature will take the same view of all the questions that have been urged here, but after having been honored by the people through you in being permitted to occupy this responsible position for so long a term, I cannot conscientiously do less than to give to the Legislature, and those who succeed me the benefit of the experience.

If it calls attention to the various matters which need attention, the purpose will have been accomplished, and the people's representatives can be relied upon to do that which is best.

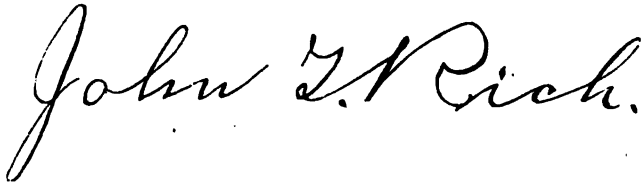
The officers of the railroad companies continue to make the reports required by law promptly and show a commendable spirit in complying with the orders of the department made for adoption of safety appliances and for the protection of the people at street and highway crossings, for which the thanks of the department are due.

There is a material increase in the business of the office, as will be shown by the records. No increase in the force employed has been

made, nor change in the personnel. The current work has been done promptly and done well. With the increase in railroad mileage and mechanical appliances, and especially in interlocking switches, the employment of a competent mechanical engineer becomes yearly more of a necessity. The present incumbent, Mr. C. B. Conger, has been industrious and painstaking and is an expert in mechanical appliances of marked ability. His report will be found in the appendix to this report.

In closing this, my last official report, allow me to again thank you for the moral support my official acts have received from you, and for the judicious and friendly counsel given whenever sought.

Very respectfully yours,

A handwritten signature in cursive script that reads "John T. Rich." The signature is written in dark ink and is positioned centrally on the page.

*Commissioner of Railroads.*





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APPENDIX.

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EIGHTEENTH ANNUAL REPORT

OF THE

COMMISSIONER OF RAILROADS

OF THE

STATE OF MICHIGAN.

1890.

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## APPENDIX.

### REPORT OF THE MECHANICAL ENGINEER.

OFFICE OF THE COMMISSIONER OF RAILROADS,  
Lansing, Mich., December 1, 1890.

HON. JOHN T. RICH.

*Commissioner of Railroads:*

SIR—During the year since the date of the last report considerable progress has been made in the adoption of safety appliances required by law on the railroads in this State. With a single exception—one car on the St. Joseph Valley Railroad—all passenger, baggage, mail and express cars used in passenger trains are equipped with air brakes. Three roads only use non-automatic vacuum brakes, one of which, the Cin. Wabash & Mich., is changing their equipment to automatic pressure brakes. In some cases the leverage or breaking power is not as high a percentage of the weight of the car as it could be, so that trains can not be stopped in the shortest possible distance in case of accident. There are about 100,000 freight cars belonging to the companies doing business in this State; 4,604 have air brakes; this number is being increased daily, so it is only a question of a short time when there will be enough air brake cars in every train to control the speed. A great many solid stock trains fully equipped with automatic brakes cross the State every day. It is to be hoped that all refrigerator cars will be also thus equipped in the near future. These cars are very generally run on a guaranteed time, at a high rate of speed and need all the brake power possible to make them safe. A fair share of freight cars belonging to other companies in our through trains are thus equipped; if the engine has an air pump, these cars are placed next the engine so as to utilize the power brakes. Driver and tender brakes operated by steam or air are being placed on locomotives by some of the companies as fast as the material can be obtained and the engines taken in the shop. Of the 2,359 engines which run in this State on commercial roads 1,415 are equipped with air pumps, 1,359 have driver brakes. All engines with air pumps for train service have tender brakes, but all these do not have driver brakes. A great many freight and switch engines are provided with steam or vacuum driver and tender brakes so that the number of engines that have a power brake on tenders will reach about 1,600. The number of driver brakes has increased 180 and air pumps 113 since March 1, 1890. A few of the smaller corporations are not moving very fast in this direction but as the time limit of the law expired only two months ago it is hardly possible for all to have complied with it. Without exception all engines built or purchased from the builders are equipped with power brakes. Some of the driver brakes in use do not have the proper percentage of braking power to weight on drivers—60 per cent is the authorized standard—which leaves a large share of the weight of the engine free, this weight must be stopped by the cars in addition to stopping themselves. Some of the short trains require from 50 to 100 per cent more distance to stop in than would be required if the proper leverage was insisted on.

The safety heating problem is yet a long way from solution. Such of companies as have adopted some method of steam heating from the engine and use it whenever possible are able in such cases to do away with fire in the cars. The M. C. R. R., D. L. & N., C. & W. M., G. R. & I., C. W. & M., Mil. & Northern, C. & N. W. Ry., main line trains of the L. S. & M. S. and two fast trains on the C. & G. T. Ry., use steam heat in their trains with very good results. When the present troublesome defects of couplings and piping outside the cars are remedied by experience, steam will be the successful heat.

An absolutely safe car stove that will heat any car has not been discovered yet. Openings to put in fuel are not always kept closed when cars are in motion; none of them after being in service one season are strong enough to stand a severe wreck.

Hot water heating by the Baker system or other heaters of that type is pretty generally used, both for regular heating and as an auxiliary in steam heated trains. While this does not do away with fire in the car, the Baker type of heater is safer than an ordinary stove in case of accident. A large share of the passenger cars in this State are equipped with this type. Some of the companies have all their cars so heated, others are putting them in as fast as the cars can be spared from service or come into the shop for overhauling. There are still some cars running on the smaller roads which have ordinary stoves. As they run very few trains, most of them part freight cars, they are not very dangerous when all the conditions are taken into consideration. The oil used for lighting cars in passenger trains has been tested at various times; when found below the standard established by law the company has been notified at once and oil of 300 degrees substituted.

One hundred three thousand and fifty-nine cars other than passenger were reported by companies operating in the State Jan. 1, 1890.

Of the total number of cars provided with automatic couplers of the M. C. B. type the C. & N. W. Ry., reports 2,310, L. S. & M. S. 2,280, M. C. R. R., 1,470, F. & P. M., 555, G. R. & I., 490, C. & W. M., 200, C. & G. T. Ry., 50, Wabash R. R., 90, Mil. & Northern, 500, Mil. L. S. & W., 115, D. L. & N., 15, other companies have a few on trial. Nearly all the companies affected by the law in this State have adopted the Master Car Builders' type of coupler for use in the freight service. Some have hundreds in use, others a few only, while some have none at all in service and manifest no disposition to comply with the law. There are 8,075 cars reported now as against 4,793 in March, 1890, an increase of 3,367. If the crippled link and pin couplers, supposed to be safety and automatic when first put on the cars, were replaced with others and their rods and levers for guiding the links and raising the pins taken off the cars it would make coupling cars less dangerous. As long as a link is used for coupling cars, men will have to go between the ends of them and get hurt as there is no mechanical substitute for the hand in guiding the link and putting down the pin. Do away with the link and the hands need not be used for that purpose. It is hoped by all the trainmen that something will be done at once to make less dangerous that class of cars that have long deadwoods each side of the drawhead extending both above and below the level of the link. When two of this class of cars come together it is impossible to couple them in the usual way, because the deadwoods or buffers strike each other before the coupling is made. As it is practically impossible to take these buffers off now the only way to make them even moderately safe is to require that a type of coupler be put on them which does not need a link and pin when two cars of this specially dangerous class come together. Cars used in log service certainly need immediate attention. Logs are habitually loaded over the ends of flat cars so that it is very dangerous for train men to couple or uncouple them. In the case of narrow gauge logging trucks where long "reaches" are used in making up trains it may be impracticable to use the M. C. B. coupler but all other log cars should have them at once.

Bridges are improving in character and strength each year, iron and stone are replacing wood and piling. A large amount of wooden trestle bridge has been filled up with earth and more than the usual amount of new work built. There have been no bridge accidents, nor have any bridges been condemned by this Department, although repairs have been called for in several cases. The law in regard to blocking frogs and guard rails is much better observed; there are very few points where the blocking is not closely looked after and accidents from neglect are very rare.

I would respectfully call your attention to the switch stands, water stand pipes and watchmen's cabins that are set too close to the main track, so that trainmen going up the side ladders or leaning out are liable to be struck and knocked off. All stand pipes and water tanks should clear the main track so there will be no possible danger to trainmen when passing at speed. Switch stands can easily be set a safe distance from main tracks to clear any thing, provided they are not located between two tracks in yards.

There are a number of telegraph order boards set so low down that they are not visible from an engine over a box car. This is not safe where a car can stand in front of a station and hide the signal from a passing train and the order boards should be set a moderate height so they can be seen from as large a part of the yard and tracks as possible. Switch targets painted the same color as the building or cars standing in the backgrounds are invisible to an engineer till too late to stop. They should be painted a bright color easily seen no matter what position they stand in and should have a certain different shape as well as different color for open and shut.

There are 60 interlocking machines at work at present and five more in process of construction. About all of them are kept in good order, a few that were not very well put in are giving out and require constant repairs. The cable and wire machines give the most trouble on account of the difficulty of keeping the cable the right length at all times. There is a demand for a better class of machines and a more rigid inspection of them than when first put in. As far as my observation goes the companies using these machines are satisfied that a cheap machine is the dearest in the end. I have inspected all these machines at intervals and have also been furnished monthly reports of their condition by the officials in charge of them. A very few accidents have taken place from carelessness on the part of towermen or engineers. Besides the saving of time and expense of stopping all trains, they are much safer than a crossing protected by signals only.

Respectfully submitted  
C. B. CONGER,  
M. E.

STATEMENT

*Showing number of locomotives, number with air pumps, number with driver brakes, number of cars with Master Car Builder's type of couplers and number of freight cars with air brakes, belonging to companies operating railroads in this State. Ore and forest roads not included.*

Company.	Total locomotives.	With air pumps.	Driver brakes.	M. C. B. couplers.	Air brakes.
An Sable & North Western .....	16	1	16		
Battle Creek & Sturgis .....	2	2			
C. & G. T. Ry. ....	151	119	81	50	
G. T. B., Detroit Division and M. A. S. Division. ....	31	18	10		
C. K. & S. ....	3	2	2		
C. & N. W. Ry. ....	786	593	412	2310-Aug. 1	2081
C. & W. M. ....	55	29	27	200	200
C. J. & M. ....	25	14	8		
Chn. Wabash & Mich. ....	27	All vacuum, 5 air pumps	27		
C. S. & M. ....	8	6	5		
D. B. C. & A. ....	20	6	20		
D. G. H. & M. ....	41	17	10	15	15
D. L. & N. ....	44	24	8		
D. S. S. & A. ....	106	34	73		34
F. & P. M. ....	93	35	71	555	
F. & S. E. ....	2	1	2		
G. R. & I. ....	65	48	40	490	29
L. S. & M. S. ....	236	66 Mar. 1	208	2280	201
Lowell & Hastings. ....	2	1	1		
Manistique R. R. ....	5		5		
Mich. Central. ....	300	149	118	1470	545
Mil. L. S. & W. ....	97	77	42	115	382
Mil. & Northern. ....	87	30	28	500	36
M. St. P. & S. Ste. M. ....	62	54	62		
Mineral Range & Hancock & Calumet	12	4	5		
Manistee & North Eastern. ....	6	3	4		1
P. O. & N. ....	5	3	1		
P. H. & N. W. ....	11	11	2		
S. T. & H. ....	6	All vacuum.	1		
St. J. Valley. ....	1	1			
T. A. A. & N. M. ....	38	18	20		
T. S. & M. ....	6	2	2		
Toledo & South Haven. ....	3	2 vacuum.			
Wisconsin Central. ....	40	37	40		
Wabash R. R. ....	17	10	12	90	500
	2359	1415	1259	8075	4804

There are more locomotives in the entire equipments, with the exception of the C. & N. W. Ry., the number given includes locomotives used in the State. There are about 100 of the 786 C. & N. W. Ry. engines at work in this State; with the exception of a few switch engines, all have air pumps and driver brakes. Since last March there has been an increase of 113 air pumps, 180 driver brakes, 3417 M. C. B. couplings, and 901 air braked freight cars to the equipment.

## STATEMENT

*Of new railroad corporations formed and reorganizations, amendments of old charters and miscellaneous changes since date of the last report from the Commissioner of Railroads, as shown by returns from the office of the Secretary of State, October 1, 1890.*

## NEW CORPORATIONS.

## MARQUETTE, CHAMPION &amp; CHICAGO RAILWAY Co.

Termini, Marquette County, Marquette and Champion.

Proposed length, 33 miles.

Capital stock, \$2,000,000.

Articles filed, October 2, 1889.

## GRAND RAPIDS &amp; LAKE MICHIGAN RAILROAD Co.

Termini, Grand Rapids and Holland.

Proposed length, 25 miles.

Capital stock, \$750,000.

Articles filed, October 22, 1889.

## DEAD RIVER RAILROAD COMPANY.

Termini, Marquette county. From a point on Duluth, South Shore & A. R. R. to a point near mouth of Dead river.

Proposed length, 3 miles.

Capital stock, \$25,000.

Articles filed, November 11, 1889.

## MANISTEE &amp; GRAND RAPIDS RAILROAD COMPANY.

Termini, Manistee and Grand Rapids.

Proposed length, 110 miles.

Capital stock, \$1,000,000.

Articles filed, November 11, 1889.

## CINCINNATI, SAGINAW &amp; MACKINAW RAILROAD COMPANY.

Termini, State line township of Seneca, Lenawee Co. and Straits of Mackinaw.

Proposed length, 350 miles.

Capital Stock, \$5,000,000.

Articles filed, December 28, 1889.

## DETROIT &amp; PETOSKEY RAILROAD COMPANY.

Termini, Wolverine and Petoskey.

Proposed length, 26 miles.

Capital stock, \$208,000.

Articles filed, January 9, 1890.

## ESCANABA, IRON MOUNTAIN &amp; WESTERN RAILROAD Co.

Termini, Escanaba and Crystal Falls via Florence, Wis.

Proposed length, 90 miles.

Capital stock, \$2,500,000.

Articles filed, January 24, 1890.

## BENTON HARBOR BELT &amp; TERMINAL RAILWAY Co.

Termini, Berrien county. From Benton Harbor to township of Royalton.

Proposed length, 10 miles.

Capital stock, \$80,000.

Articles filed, February 24, 1890.

COMMISSIONER OF RAILROADS.

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**FRANKFORT, CRYSTAL LAKE & GLENN ARBOR R. R. Co.**

Termini, Frankfort and Glenn Arbor.

Proposed length, 44 miles.

Capital stock, \$400,000.

Articles filed, March 20, 1890.

**GRAND RAPIDS, CHICAGO & ST. LOUIS RAILROAD COMPANY.**

Termini, Grand Rapids and Benton Harbor, via Holland.

Proposed length, 80 miles.

Capital stock, \$1,000,000.

Articles filed, March 27, 1890.

**OLIVET RAILWAY COMPANY.**

Termini, Olivet and G. T. Ry. at Olivet Station.

Proposed length, 2½ miles.

Capital stock, \$20,000.

Articles filed, May 5, 1890.

**DETROIT & TOLEDO RAILWAY COMPANY.**

Termini, Detroit and Toledo.

Proposed length, 50 miles.

Capital stock, \$400,000.

Articles filed, June 26, 1890.

**IRON RANGE & HURON BAY RAILROAD CO.**

Termini, Huron Bay and Michigamme.

Proposed length, 50 miles.

Capital stock, \$500,000.

Articles filed, June 30, 1890.

**SOUTH LYON & NORTHERN RAILWAY COMPANY.**

Termini, Leeland, Washtenaw county, and Flint.

Proposed length, 40 miles.

Capital stock, \$400,000.

Articles filed, July 21, 1890.

**PAINT RIVER RAILWAY CO.**

Termini in Iron Co.

Proposed length, 15 miles.

Capital stock, \$120,000.

Articles filed, June 14, 1890.

AMENDMENTS.

**CHICAGO & WEST MICHIGAN RAILWAY Co.**

Adding branch from Baldwin to Mackinaw City.

Filed, July 19, 1889.

**DETROIT & ST. CLAIR RIVER RAILWAY Co.**

Increasing number of directors.

Filed, January 29, 1890.

**TOLEDO, ANN ARBOR & NORTH MICHIGAN RAILWAY Co.**

Termini, Toledo, Ohio, and Copemish, Mich.

Proposed length, 377 miles.

Capital stock, \$3,000,000.

Articles filed, May 22, 1890.

SALES.

**IRON RANGE RAILWAY COMPANY.**

Notice of sale to Chicago & North Western Railway Company.

Filed, March 19, 1890.

## ANNUAL REPORT OF THE

## RE-ORGANIZATIONS.

**BAY CITY & BATTLE CREEK RAILWAY COMPANY.**

Termini, Bay City and Battle Creek.

Proposed length, 130 miles.

Capital stock, \$1,000,000.

Articles filed, November 12, 1889.

**BATTLE CREEK & STURGIS RAILWAY COMPANY.**

Termini, Battle Creek and Sturgis.

Proposed length, 40 miles.

Capital stock, \$1,000,000.

Articles filed, November 14, 1889.

**STURGIS, GOSHEN & ST. LOUIS RAILWAY COMPANY.**

Termini, Sturgis and Michigan State line.

Proposed length, 6 miles.

Capital stock, \$2,000,000.

Articles filed, May 29, 1890.

## CIRCULARS

ISSUED BY THE COMMISSIONER OF RAILROADS TO RAILROAD MANAGERS AND EMPLOYEES, DURING THE YEAR OF 1889-90.

OFFICE COMMISSIONER OF RAILROADS, }  
*Lansing, Mich., December 20, 1889.* }

**TO GENERAL MANAGERS AND SUPERINTENDENTS OF RAILROADS:**

You are hereby directed to cause a daily examination of all interlocking devices under your respective charges, to be made on and after January 1, 1890, and cause a record to be made of such inspection, whether out of order or not.

On or before the fifth day of each month you will report to this office the condition of the several interlocking devices under your charge for the preceding month, for which purpose you will receive blanks now in course of preparation.

All serious accidents should be made a special report of at once.

In case of any derangement of block, derailer or detection bar, the order allowing trains to cross without being brought to a full stop, as required by law, is hereby suspended in each case until the device is again in order.

You will instruct the attendants in case of any derangement of the character noted above, to in no case give the train a signal to cross until the train has been brought to a full stop, as required by law.

Yours respectfully,

JOHN T. RICH,  
*Commissioner of Railroads.*



COMMISSIONER OF RAILROADS.

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OFFICE COMMISSIONER OF RAILROADS, }  
*Lansing, Mich., December 20, 1889.* }

TO GENERAL MANAGERS AND SUPERINTENDENTS OF RAILROADS:

The fact that it is not uncommon to find the detection bars uncoupled or removed from interlocking switches, and in some instances switch blocks removed, and in others derailleurs uncoupled and spiked, thus not only removing the measure of safety expected to be obtained by the use of the interlocker, but making them the cause of increased danger, is the reason for the issuing of the enclosed order.

After careful examination and due consideration, it is deemed absolutely necessary that this or some equally effective method for the care of these important devices should be adopted, or they will be found elements of danger rather than safety. As an aid to keep these devices in order, this department will cause inspections to be made at irregular intervals.

Your hearty and earnest co-operation in making the interlocking machines safe and efficient is earnestly requested.

Blanks for monthly reports to this office will be furnished as needed.

Yours respectfully,

JOHN T. RICH,  
*Commissioner of Railroads.*

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STATE OF MICHIGAN, }  
OFFICE OF COMMISSIONER OF RAILROADS, }  
*Lansing, Mich., January 8, 1889.* }

TO GENERAL MANAGERS AND SUPERINTENDENTS OF RAILROADS:

Owing to the fact that no system of heating cars has yet proven entirely satisfactory and that the weather during the winter of 1888 and 1889 was so mild that no real tests were possible as to the efficiency of methods of heating not previously tested, this department determined to adopt a conservative course and avoid to some extent the experiences of the winter 1889 and 1890. Railroad managers were informed that the better class of hot water heaters would not be ordered out during the present winter. But it has recently come to the knowledge of this department that in some instances cast iron stoves usually used with the door in the side open, are being used in cars forming part of passenger trains. In some instances they are cars belonging to foreign companies whose cars run through this State, but as the practice is in strict violation of the letter and spirit of the law, they must not be used in any car forming part of a passenger train under any circumstances. In addition to this a class of frail heaters, of which the spears is a fair representative, is still used in some of the cars now running in this State, which will not stand any considerable shock without permitting fire to escape, and no time should be lost replacing them with safer heaters. Heaters of the McEwan type which are constructed substantially, but are rendered dangerous by the door being left open, should be removed as soon as possible, and meanwhile all companies having them in use, in case of accident therefrom, will be held to strict accountability under the provisions of the law. When doubt exists as to what heater should be put in, it would seem that any company would be safe in adopting the Baker Hot Water Heater on which there is no patent, and which can afterwards be enclosed in a steel closet, or the pipes utilized for steam, or the water in the pipes heated by steam while the heater can be used in emergencies. Your co-operation is respectfully urged in making the heating of cars as safe as possible pending the perfection of some system or systems of heating cars which may properly receive the approval of this department, and in which you have confidence enough to feel justified in adopting for use on your respective lines.

Yours respectfully,

JOHN T. RICH,  
*Commissioner of Railroads.*

## ANNUAL REPORT OF THE

STATE OF MICHIGAN.  
 OFFICE OF THE COMMISSIONER OF RAILROADS, }  
 Lansing, Mich., Feb. 11, 1890.

*To General Managers and Superintendents of Michigan Railroads:*

It having come to the knowledge of this department, that the wires of electric street railroads have been erected at a less distance above the track than is allowed by law for bridges and other obstructions unless suitably guarded, and believing that a heavily charged electric wire is an obstruction which is especially dangerous, you are hereby instructed not to permit the erection or maintenance of such wires across the tracks of any steam railroads, unless they are so high above the tracks that a man on the highest cars run on the road will not be injured by them, which to cover all contingencies should not be less than twenty-four feet above the track. Provision should also be made against accidents in the case of the breaking of an electric wire at or near the crossing of a steam railroad. It is probable that the street railroad companies were aware of the danger to which their wires subjected train men, or they would not have been thus erected, but the number of crossings of this kind which are liable to be made in the near future, and the great danger to human life which they involve, demand prompt action on your part, and it is earnestly urged that you will give this important matter immediate attention.

Very respectfully yours,

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 Commissioner of Railroads.

OFFICE OF THE COMMISSIONER OF RAILROADS, }  
 Lansing, Mich., March 1, 1890.

*To General Managers and Superintendents of Michigan Railroads:*

GENTLEMEN—In 1886 my predecessor, Hon. William McPherson, under the provision of the law, selected seven so-called automatic car couplers from which railroad companies were to select some pattern for use on their respective roads. Mr. McPherson called to his aid the service of many of the managers and mechanical superintendents of Michigan, and there is no doubt that each coupler selected met with the approval of some practical railroad men. Except by the representatives of some couplers not in the list, I have never heard the wisdom of the selections made questioned, considered in the light of the experience then possessed. The experience of four years has, however, demonstrated, that few if any of them are of practical value for the purpose for which they were intended—to preserve the lives and limbs of train men. The reason of their failure is too well known to all of you to require explanation here. One thing may, however, be stated; that is, they lack uniformity, without which any number of couplers, however perfect in themselves, must fail when put into service. On January 1, next, the law of this State requires all freight cars to be equipped with automatic couplers. If the railroad companies go on and comply literally with the law, but select from different types of couplers, nothing has really been accomplished towards reducing the casualties resulting from the coupling of cars; and, in the opinion of many, the danger has been actually increased. In view of the action of a majority of the master car builders in adopting a particular type of coupler which, while coupling with each other, is not confined to a particular kind of which some syndicate has a monopoly, and the action of so many of the leading roads in adopting this type leads to the hope that through this action early uniformity is promised, while competition and experience may be relied upon to remedy any defect which their general use may show them to possess. For the reasons stated you are respectfully requested to advise me of your reasons why all of the following named couplers should not be withdrawn from the list of those from which companies may select. This will leave only two now standing as approved, the Janney and Dowling, both of the master car builder's type. There is no reason why others of this type should not be approved, and the withdrawal of the accompanying list will leave the field clear for the approval of any new devices presented under the provisions of the Coupler Act of 1887. Also, if this action is taken, is there any reason

why all railroad companies shall not be required to equip their cars with this type of coupler as fast as the cars go to the shops for repair or new ones are built?

This is an important question which it is hoped each one of you will consider, and advise this office on or before April 1, of your conclusions. Those making no reply will be presumed to favor the action outlined above.

The following is the list of couplers hereinbefore referred to:

AIKMAN COUPLER—P. A. Aikman, Detroit, Mich.  
 BLOCKER—John A. Blocker, Chicago, Ill.  
 MARKS—C. E. Marks, Flint, Mich.  
 PERRY—W. V. Perry, Chicago, Ill.  
 AMES—Ames Car Coupling Co., Philadelphia, Pa.  
 THE COWELL—Cleveland, Ohio.  
 MCCREE—James McCree, Lansing, Mich.

Very respectfully yours,

JOHN T. RICH,  
*Commissioner of Railroads.*

**ORDER OF THE COMMISSIONER OF RAILROADS UNDER THE PROVISIONS OF ACT NO. 88, SESSION LAWS OF 1887 REGULATING THE USE OF FREIGHT CAR COUPLERS AND CIRCULAR WITH REGARD TO POWER BRAKES AND PASSENGER CAR HEATERS ON MICHIGAN RAILROADS FROM AND AFTER JANUARY 1, 1891.**

OFFICE OF THE COMMISSIONER OF RAILROADS, {  
*Lansing, Mich., May 20, 1890.*

**TO GENERAL MANAGERS AND SUPERINTENDENTS OF MICHIGAN RAILROADS:**

GENTLEMEN—On March 1, 1890, a circular of inquiry was issued from this office as to the propriety of withdrawing from the list of couplers, from which railroads may select all so-called automatic link couplers, and requiring all cars to be equipped with the Master Car Builder's Type as fast as new cars are built or taken to the shops for renewal of draw-bars or general repairs.

The replies to this circular are almost unanimous in favor of this action. There is a difference of opinion as to when all cars should be required to be equipped, but otherwise both managements and train men favor this action. Favorable replies have been received from the general managers of the following railroads—Chicago & West Michigan; Chicago & North Western; Detroit, Lansing & Northern; Flint & Pere Marquette; Grand Rapids & Indiana; Lake Shore & Michigan Southern; Michigan Central; Milwaukee, Lake Shore & Western; Milwaukee & Northern; and the Toledo, Ann Arbor & North Michigan. Personal interviews with the managers of other roads who have not made formal replies to the circular, show a general consensus of opinion favorable to the proposed action by this department.

Having fully considered this subject, it has been decided to follow the course indicated in circular of March 1, 1890. You will therefore take notice, that on and after this date the several freight car couplers authorized for use in the State by the official order of the Commissioner of Railroads, promulgated May 1, 1888, a copy of which is appended hereto, viz: the Aikman Automatic Car Coupler; the Ames Automatic Car Coupler; the Blocker Automatic Car Coupler; the Cowell Freight Coupler; the Marks Automatic Coupler, the McCree Automatic and the Perry Car Coupler will no longer be authorized for use in this State, and the above mentioned order is hereby recalled and rescinded.

The following couplers or draw bars of the vertical plane class have already been authorized for use in this State, viz: the Janney, Dowling, Gould, and Hinson, and other couplers of the Master Car Builder's type, will be approved, upon the application of the manager or any railroad wholly or partly in this State, upon depositing in this office a model of the coupler desired to be used.

For your information the provisions of the law of this State in relation to car couplers, the circular of March 1, and the replies, so far as available for publication, thereto are appended to and made a part of this circular.

That of Mr. Ledyard, president and general manager of the Michigan Central Railroad Company, enclosing copy of resolution adopted by the president of the Vanderbilt system of roads in the United States, April 29, ult., is of especial importance in this connection, as the roads represented at that meeting not only have large track mileage of their own, but in importance of line and traffic connections are second to no other system in the country. Their official action with reference to the matter in question must necessarily have an important bearing upon its final solution.

Yours respectfully,

JOHN T. RICH,  
Commissioner of Railroads.

## ORDER WITH REGARD TO USE OF AUTOMATIC COUPLERS ON FREIGHT CARS.

STATE OF MICHIGAN,  
OFFICE OF THE COMMISSIONER OF RAILROADS. }

To \_\_\_\_\_  
\_\_\_\_\_ of the Rail \_\_\_\_\_ Company.

WHEREAS, The Legislature of the State of Michigan, by the requirements of Act No. 147, Session Laws of 1885, "Approved June 5, A. D. 1885," provided for the introduction and use on all cars owned and operated by any railroad company or other corporation doing business in this State of some form of automatic car coupling, which said Act No. 147 reads as follows:

AN ACT to provide for the introduction and use on all cars owned and operated by any railroad company or other corporation doing business in this State, of some form of automatic car coupling, by means of which all cars may be coupled and uncoupled without the necessity of the brakeman or other person passing between the cars.

SECTION 1. *The people of the State of Michigan enact, That every railroad company on and after the first day of July, 1886, owning or operating a railroad or any portion of a railroad, wholly or partly in this State, shall place or cause to be placed, upon every freight car thereafter constructed, purchased, or leased by such corporation, and upon every freight car owned or leased by such corporation which is sent to the shop for general repairs, or for repair of the coupling fixtures thereof, with the intent to use such car, such form of automatic or other safety coupler, at each end thereof as the Commissioner of Railroads after examination and test of the same may prescribe. And such Commissioner of Railroads, on or before May 1, 1886, shall select two or more different patterns of automatic or safety coupler which will couple with each other, and also with the link and pin coupler now generally in use, from which patterns said railroad companies may select couplers for use on cars, as required by this Act.*

SEC. 2. *The provisions of this act may be enforced by any Circuit Court of this State in a county through which the railroad of any company refusing to comply with such provisions may run, upon application of the Commissioner of Railroads, under such penalty as the said court may determine, of not less than one hundred dollars for each violation of the provisions of this act.*

Now, therefore, be it known, that in accordance with the requirements of the aforesaid Act No. 147, and by virtue of the authority therein vested in the undersigned, Commissioner of Railroads, in and for said State of Michigan, I have this day selected, and by these presents do hereby select, the following named automatic car couplers, and designate the same for use on the several railroads in the State, to wit:

The Aikman Automatic Car Coupler; P. A. Aikman, Detroit, Mich., Patentee.

The Ames Automatic Car Coupler; Ames Car Coupling Co., Philadelphia, Pa., owners of patent.

The Blocker Automatic Car Coupler; John C. Blocker, Chicago, Ill., Patentee.

The Cowell Freight Coupler; The Cowell Platform and Coupler Co., Cleveland, Ohio, owner of patent.

The Marks Automatic Coupler; C. E. Marks, Flint, Mich., Patentee.

The McCree Automatic Coupler; James McCree, Lansing, Mich., Patentee.

The Perry Car Coupler (with "safety attachment"); W. V. Perry, Chicago, Ill., Patentee.

And it is hereby ordered and directed—

1. That you select from the patterns of couplers contained in the above designated list, one or more thereof to be placed on the cars in use upon the railroad tracks owned

or operated by your company within the limits of the State of Michigan from and after the first day of July, next, in accordance with the provisions of said Act No. 147 hereinbefore recited.

2. That on or before the said first day of July, A. D. 1886, you report to this office the selection of couplers made by you for use on your road, in accordance with the requirements of the preceding section of this order.

Given under my hand, at the Capitol, in the city of Lansing, this first day of May, A. D. 1886.

WM. MCPHERSON, JR.,  
Commissioner of Railroads.

AN ACT to provide for the introduction and use on all cars owned and operated by any railroad company or other corporation doing business in this State, of some form of automatic car coupling, by means of which all cars may be coupled and uncoupled without the necessity of the brakeman or any other person passing between the cars.

[Act No. 88, Laws of 1887.]

(283.) SECTION 1. *The People of the State of Michigan enact*, That on and after the first day of July, one thousand eight hundred and eighty-six, every railroad company owning or operating any portion of a railroad wholly or partly in this State, shall cause to be placed upon each end of every freight car thereafter constructed, purchased or leased, for use in this State, by such corporation: or which may be sent to the shops for general repair or for repair of the coupling fixtures thereof, some form of safety coupler or safety coupling device, by which the cars can be coupled and uncoupled from either side of the train without the necessity of going between the cars, and which will couple with either forms of safety coupler, and with the ordinary link and pin coupler: *Provided*, That no coupler or device for coupling of cars shall be adopted for use by any railroad company owning or operating any railroad wholly or partly within this State until approved by the Commissioner of Railroads: *Provided further*, That no freight car shall be run upon any of the railroads within this State after the first day of January, eighteen hundred and ninety-one, unless furnished with safety couplers as provided by this act.

This act is ordered to take immediate effect.

Approved April 28, 1887.

OFFICE OF THE COMMISSIONER OF RAILROADS, }  
Lansing, Mich., March 1, 1890. }

*To General Managers and Superintendents of Michigan Railroads:*

GENTLEMEN—In 1886 my predecessor, Hon. William McPherson, under the provision of law, selected seven so-called automatic car couplers from which the railroad companies were to select some pattern for use on their respective roads. Mr. McPherson called to his aid the service of many of the managers and mechanical superintendents of Michigan, and there is no doubt that each coupler selected met with the approval of some practical railroad men. Except by the representatives of some couplers not in the list, I have never heard the wisdom of the selections made questioned, considered in the light of the experience then possessed. The experience of four years has, however, demonstrated that few if any of them are of practical value for the purpose for which they were intended—to preserve the lives and limbs of train men. The reason of their failure is too well known to all of you to require explanation here. One thing may, however, be stated: that is, they lack uniformity, without which any number of couplers, however perfect in themselves, must fail when put into service. On January 1, next, the law of this State requires all freight cars to be equipped with automatic couplers. If the railroad companies go on and comply literally with the law, but select from different types of couplers, nothing really has been accomplished towards reducing the casualties resulting from the coupling of cars; and, in the opinion of many, the danger has been actually increased. In view of the action of a majority of the master car builders in adopting a particular type of coupler which, while coupling with each other, is not confined to a particular kind of which some syndicate has a monopoly, and the action of so many of the leading roads in adopting this type leads to the hope that through this action early uniformity is promised, while competition and experience may be relied upon to remedy any defect which their general use may show them to possess. For the reasons stated you are respectfully requested to advise me of your reasons why all of the following named couplers should not be withdrawn from the list of those from which companies may select. This will leave only two now standing as approved, the Janney and the Dowling, both of the master car builder's type. There is no reason why others of this type should not be approved, and the withdrawal of the accompanying list will leave the field clear for the approval of any new device presented under the provisions of the Coupler Act of 1887. Also, if this action is taken, is there any reason

why all railroad companies should not be required to equip their cars with this type of couplers as fast as the cars go to the shops for repairs or new ones are built?

This is an important question which it is hoped each one of you will consider, and advise this office on or before April 1, of your conclusions. Those making no reply will be presumed to favor the action outlined above.

The following is the list of couplers hereinbefore referred to:

AIKMAN COUPLER—P. A. Aikman, Detroit, Mich.

BLOCKER—John A. Blocker, Chicago, Ill.

MARKS—C. E. Marks, Flint, Mich.

PERRY—W. V. Perry, Chicago, Ill.

AMES—Ames Car Coupling Co., Philadelphia, Pa.

THE COWELL—Cleveland, Ohio.

McCREE—James McCree, Lansing, Mich.

Very respectfully yours,

JOHN T. RICH,

Commissioner of Railroads.

MICHIGAN CENTRAL RAILROAD COMPANY, }  
PRESIDENT'S OFFICE,  
Detroit, Mich., May 5, 1890.

John T. Rich Esq., Comr. of Railroads, Lansing:

DEAR SIR—Inclosed herewith I send you a copy of the resolution which was passed at the meeting of the presidents of the Vanderbilt Lines on April 29, with regard to the equipment of freight cars with air brakes and self-couplers.

It was not thought best to specify any special make of self-couplers, but to leave the roads free to experiment with different couplers of the vertical type, it being the understanding that any coupler adopted by any one company should be such as would interchange with other couplers of a vertical type which any of the other Vanderbilt roads might decide to adopt.

I think this is a great stride in the direction of uniformity and am satisfied, that if carried out, will soon result in the doing away of much of the trouble we have had in the past with the question of couplers and brakes.

Yours truly,

H. B. LEDYARD,  
President.

*Resolution, re-equipment of freight cars with air brakes and self-couplers, passed unanimously at president's meeting held April 29, 1890.*

Present, Messrs. C. Vanderbilt, Depew, Hayden, Webb, Newell, Ledyard, Caldwell Ingalls, Laying and Bliss.

*Resolved, That all freight cars hereafter built by the roads in the Vanderbilt system, and by the Boston & Albany, shall be equipped with the air brake; and that all colored line and local box and stock cars of 24 feet in length and upwards, now in service on said roads, shall have the air brake attached as fast as they come into the shop for repairs; and that all such cars so built or repaired shall be also equipped with a self-coupler of what is known as the vertical plane type.*

CHICAGO & NORTH WESTERN RAILWAY, }  
OFFICE OF THE GENERAL MANAGER,  
Chicago, March 6, 1890.

DEAR SIR—Referring to your circular letter of March 1, in reference to automatic couplers for freight cars.

I do not wish to refer to any of the couplers named in your list, except those that I have had actual experience with. The only one that we have used is the Blocker. A large number of our ore cars were equipped with this bar, which, since a bar of the "Janney" type has been determined as the standard, is of no value. I am taking it off

of all our ore cars, and am now equipping all of our large ore cars with Westinghouse Automatic Brake and Janney Couplers. We shall have about eighteen hundred (1800) cars so equipped and in use in our ore traffic in the State of Michigan after April 1.

The only obstacle in the way of a compliance with the laws of Michigan which you refer to as going into effect on January first, next, is the expense of fitting up the entire equipment of any one road before that time. It is an impossibility for us to do it even if we could bear the expense. You can very easily see what this would be to equip twenty-seven thousand (27,000) freight cars at the expense of from twenty-six to twenty-seven dollars per car. There are also a large number of foreign cars, the fitting of which we could not control. In addition to the ore cars I have named above we are having five hundred (500) new box cars built, which are also equipped with Westinghouse Air Brake and Automatic Couplers of the Janney make, and it is our intention to equip all freight cars constructed hereafter in this manner.

MR. JOHN T. RICH,  
Commissioner of Railroads,  
Lansing, Michigan.

Very truly,  
J. M. WHITMAN,  
General Manager.

GRAND RAPIDS & INDIANA RAILROAD COMPANY,  
OFFICE OF PRESIDENT AND LAND COMMISSIONER,  
Grand Rapids, Mich., March 13, 1890.

John T. Rich, Railroad Commissioner, Lansing, Mich.:

DEAR SIR—I have your favor of the 1st inst. relative to the withdrawal of several automatic car couplers in use on Michigan roads, in accordance with the requirements of the law, and the adoption of the vertical plane couplers in their stead. I think the idea is a good one, and our company will be very glad to comply. I would add to the list already approved the "Hinson" car coupler, Rookery Building, Chicago.

I know of no reason why all roads should not be permitted or required to use the styles named whenever it is necessary to take cars to shops for repairs or new ones are built, or when the old material ceases to be of value. We have been doing this for some time past, and at present have over three hundred equipped with Janney Couplers. At the time of the selection, this company recommended and urged the Janney but both then and afterwards was refused permission to use it, consent only having been given at a comparatively late period.

Yours very truly,  
W. O. HUGHART,  
Pres't and General Manager.

FLINT & PERE MARQUETTE RAILROAD,  
SUPERINTENDENT'S OFFICE.  
East Saginaw, Mich., March 22, 1890.

SANFORD KEELER, Superintendent.

Hon. John T. Rich, Commissioner of Railroads, Lansing, Mich.:

DEAR SIR—Answering your circular of March 1, in regard to draw bars, saying: "In 1886 my predecessor, Hon. Wm. McPherson, under the provisions of the law, selected seven so-called automatic car couplers from which railroad companies were to select some pattern for use on the respective roads," would say that this company has adopted the "Marks" draw bar, and after several years' use of the same, we find that, while the draw bar works very satisfactorily in every way, it is not going to be the one generally adopted by railroads, but that the "Janney" type is the one, and we are now putting on the "Janney" type and testing the "Thurmond," "Gould," and "Hinson" Couplers. These are all automatic with each other, and there is not much difference in their respective merits.

I think it would be well to have all automatic draw bars or couplers withdrawn excepting the vertical plane, which would include the "Janney" type and the "Miller" or "Cowell."

We have 200 of the "Gould," about 50 of the "Thurmond" couplers in use. We would also like to have permission to continue the use of the "Marks" draw bar, as we have a large number of them on cars, and they are working satisfactorily.

Yours truly,

SANFORD KEELER,  
*Superintendent.*

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CHICAGO & WEST MICHIGAN RAILWAY,  
DETROIT, LANSING & NORTHERN RAILROAD,  
SAGINAW VALLEY & ST. LOUIS RAILROAD,  
Grand Rapids, Mich., March 6, 1890. }

*John T. Rich, Esq., Commissioner of Railroads, Lansing, Mich.:*

DEAR SIR—Your circular of March 1, relative to car couplers, has just been received. I will take an opportunity to look into this question, as affecting the two roads under my management, within a day or two, and advise you more fully.

I have had some experience with the Gould coupler, which has been very satisfactory indeed. It is of the Master Car Builder's type, and possesses features, that, in my opinion, make it superior to even the Janney and Dowling. If you have not seen it, with your permission I will send you a sample.

Yours truly,  
CHAS. M. HEALD,  
*General Manager.*

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CHICAGO & WEST MICHIGAN RAILROAD, }  
*Muskegon, Mich., April 6, 1890.*

A. D. HART, General Yard Master.

*John T. Rich, Esq., Commissioner of Railroads:*

DEAR SIR—Yours asking my views regarding the different couplers at hand and I will say we have given several of them very severe tests in this yard. This company had several of their cars equipped with the Hinson Coupler and that company wished we should give them the hardest test we could; we did so by throwing them together 10 to 12 miles per hour and they stood the test and coupled each time.

Now I can say in my judgment the Janney and Hinson coupler is the best in use and they work well together, and hope the will be adopted.

Yours very truly,

A. D. HART, G. Y. M.

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TOLEDO, ANN ARBOR & NORTH MICHIGAN RAILWAY CO., }  
GENERAL OFFICE,  
Toledo, Ohio, March 5, 1890. }

*Hon. John T. Rich, Lansing, Commissioner R. R.:*

MY DEAR SIR—I have received a copy of your circular letter of the 1st inst. On the part of this company I request that your predecessor's circular issue in 1886, relative to Automatic car couplers be modified. Our experience with the Blocker, the Marks, the



McCree and the Ames, has forced the conclusion that an additional element of danger is added by their use.

It is impracticable in my judgment to make the law of '86 operative—the equipment of the State could not be changed in the nine months succeeding April 1, next.

I do not know that the Janney type is a practical success on freight equipment. I have noticed that the Pennsylvania system—its officers were the most urgent having the pattern adopted—have had several thousand cars built and equipped with the link and pin coupler during the past six months.

So long as there seems reasonable ground to question the final solution of this problem, I do not think it would expedite a conclusion to compel all railroads to replace their present patterns when cars are built or repaired.

The class of traffic in which this device is most necessary and where the utility of a pattern can be best demonstrated is the stock, dressed beef and time freight cars.

If stock cars could be equipped with this pattern of draw bar, they are less likely to become separated than any other and less likely to leave the State and if it proves itself capable and desirable on trial, then applied to dressed beef, charcoal and like classes of cars I would consider that we were on the road to a solution of our difficulty.

On the other hand if we must equip a car today which is likely to be in Georgia next week and not be returned for six months, we would delay an intelligent solution of a question which I assure you is much oftener in the minds of those who have charge of the railroads of your State than your legislators, citizens or your State representatives in your office.

My suggestion is: *First*, The execution of the present law is impracticable. *Second*, It should be amended in such manner that the companies in your State should be compelled to equip their local cars—stock, charcoal, dressed beef, with the form of coupler which now promises best results, the Janney.

Respectfully;

H. W. ASHLEY.

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PENNSYLVANIA RAILROAD CO.,  
OFFICE OF THE GENERAL MANAGER,  
Philadelphia, Pa., March 29, 1890. }

233 South Fourth Street.

Mr. John T. Rich, Commissioner of Railroads, Lansing, Michigan:

DEAR SIR—Replying to your inquiry of the 20th instant, I have to say that our management have been for a long time in favor of the vertical hook coupler, and our experience thus far has but strengthened this conviction, notwithstanding all the discussions that have been had, to some of which you refer, in reference to this form of coupling. You will appreciate that with such a large equipment as our own the expense of changing would be enormous, but we are going ahead just as rapidly as we feel we can afford and equipping cars with this form of coupler. We shall probably add several thousand during the present year.

We believe the Janney type of coupler is the best known.

Yours truly,

CHAS. T. VEIGH,  
General Manager.

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WOLVERINE DIV. 182,  
ORDER OF RAILWAY CONDUCTORS. }  
Jackson, Mich., April 16, 1890.

John T. Rich, Commissioner of Railroads, Lansing, Mich:

DEAR SIR—At a regular meeting, held April 14, your circular of March 1, was presented and duly discussed, and would say that the sentiments expressed therein are most heartily concurred in by Div. 182, Order of Railway Conductors, and we further believe

that the action as outlined in your circular is the best that can be done under existing circumstances. Assuring you of our hearty co-operation, we are are yours

Very truly,

A. SWIDENSKY,  
Sec. Div. 182.

311 Oak St., Jackson, Mich.

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ORDER RAILWAY CONDUCTORS,  
BATTLE CREEK DIVISION, No. 6, }  
Battle Creek, Mich., April 14, 1890.

To the Hon. John T. Rich:

Your circular of March 1 before Division No. 6. The sense of the meeting was that the Janney coupling was the best on the list, but that there was room for lots of improvement, and if there cannot be a uniformity in some, that the No. 3 Standard Draw Bar is far preferable to any such as the C. & G. T., uses. Hoping that there may be something brought about that will lessen the danger of trainmen, we remain,

Yours in respect,

W. J. MILLER,  
Secretary-Treasurer No. 6.

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SWITCHMEN'S MUTUAL AID ASSOCIATION, }  
OF NORTH AMERICA,  
OFFICE OF LODGE No. 13,  
Detroit, April 12, 1890.

John T. Rich, Esq.:

DEAR SIR—In reply to yours of the 20th, I will say that the draw bar question has been thoroughly discussed by the members of the Detroit Lodge, No. 13, Switchmen's Mutual Aid Association of North America, and I am instructed to write to you that none of the "patent" draw bars mentioned in your circular are approved of. The only draw bar favored by our lodge is the "Safford Bar" without any improvements on it. Hoping this will prove satisfactory, I remain

Yours fraternally,

FRANK D. WOLFE,  
Recording Secretary.

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BROTHERHOOD OF RAILROAD BRAKEMEN, }  
WEST BAY CITY LODGE No. 147,  
March 30, 1890.

Mr. John T. Rich, Commissioner of Railroads:

I wish to say in behalf of the trainmen of the Mackinaw division of the M. C. R. R. that the withdrawal of all couplers except the Janney and Dowling, or any other that may work in unity with them, should be done, and that all freight cars should be equipped with the Janney or Dowling, or any other of same pattern, and more especially our log train cars, as they are the worst trains to couple and handle we have, and the most dangerous.

Yours truly,

MYRON C. GARDNER,  
West Bay City, Michigan.

BROTHERHOOD OF LOCOMOTIVE FIREMEN, }  
 LODGE No. 84,  
 Battle Creek, Mich., April 10, 1890. }

*C. B. Conger, Esq., Mechanical Engineer:*

DEAR SIR—A note dated March 31, from Mr. Rich, Commissioner of Railroads this State, received, and contents of accompanying circular carefully noted. Individually, have not given couplers enough thought to be able to give any advice that would be of practical value. Was talking to a conductor a few days ago, what he considered the best coupler. He said the Janney was about the best, and it would couple with all others. Five minutes later a brakeman got his arm caught between buffers of a G. R. & I. and a N. Y., L. E. & W., one more instance of the necessity of that law. All those I have talked with, conductors and engineers, say some of the patent couplers are a nuisance, and that system or uniformity ought to be studied. The best is the cheapest. Will write you again if I can give you anything worth hearing.

I am yours respectfully,

JOHN TIGHE.

*Fort Gratiot, Mich., March 28, 1890.*

*John T. Rich, Esq., Railroad Commissioner, Lansing, Mich.:*

DEAR SIR—The Brotherhood of R. R. Trainmen in session, March 23, considered the question in this circular. The lodge consisting of some 58 practical railroad men, without a dissenting vote, recommended that the draw bars named should be withdrawn from use, and that the Janney, Dowling or Skinner type are the only ones tried that come near meeting the intention and requirements of the law, and they instructed me to notify you of their opinions.

I am respectfully yours,

A. W. LOVELAND,  
 Master St. Clair Lodge No. 241, B. of L. T.

OFFICE OF THE COMMISSIONER OF RAILROADS, }  
 Lansing, Mich., May 20, 1890. }

*To General Managers and Superintendents of Michigan Railroads:*

GENTLEMEN—Inasmuch as the use of driver-brakes upon locomotives, and the heating of passenger cars have been the subject of serious consideration by the railroad managements of the country during the last two years, and which in this State especially, has resulted in important legislation connected therewith, I have thought it desirable as a matter of general information to publish in addition to the foregoing order with regard to freight car couplers, the following:

- 1—Copy of circular issued from this office January 8, 1890, with regard to passenger cars and inhibiting the use of certain classes.
- 2—Act No. 182 Session Laws of 1889 with regard to the use of power brakes upon locomotives and cars, in certain cases on and after October 1, 1890.
- 3—Act N. 211 Session Laws of 1889, providing for the use of safety heaters upon the railroads in this State on and after November 1, 1890.

The results from experiments thus far made by our railroad companies in different methods of heating cars, lead to the belief that the solution of that uncertain problem will not be much longer delayed, while the progress already made in complying with our law with regard to power brakes, indicates that its provisions have the uniform approval of our railroad managements.

Very respectfully yours,

JOHN T. RICH,  
 Commissioner of Railroads.

STATE OF MICHIGAN,  
OFFICE OF COMMISSIONER OF RAILROADS,  
Lansing, Mich., Jan. 8, 1890.

*To General Managers and Superintendents of Railroads:*

Owing to the fact that no system of heating cars has yet proven entirely satisfactory and that the weather during the winter of 1888 and 1889 was so mild that no real tests were possible as to the efficiency of methods of heating not previously tested, this department determined to adopt a conservative course, and avoid to some extent the experiences of the winter 1889 and 1890. Railroad managers were informed that the better class of hot water heaters would not be ordered out during the present winter. But it has recently come to the knowledge of this department that in some instances cast iron stoves usually used with the door in the side, open, are being used in cars forming part of passenger trains. In some instances they are cars belonging to foreign companies which run through this State, but as the practice is in open violation of the letter and spirit of the law, they must not be used in any car forming part of a passenger train under any circumstances. In addition to this a class of frail heaters, of which the Spears is a fair representative, is still used in some of the cars now running in this State, which will not stand any considerable shock without permitting fire to escape, and no time should be lost in replacing them with safer heaters. Heaters of the McEwan type which are constructed substantially, but are rendered dangerous by the door being left open, should be removed as soon as possible, and meanwhile all companies having them in use, in case of accident therefrom, will be held to strict accountability under the provisions of the law. When doubt exists as to what heater should be put in, it would seem that any company would be safe in adopting the Baker Hot Water Heater on which there is no patent, and which can afterwards be inclosed in a steel closet, or the pipes utilized for steam, or the water in the pipes heated by steam while the heater can be used in emergencies. Your co-operation is respectfully urged in making the heating of cars as safe as possible pending the perfection of some system or systems of heating cars which may properly receive the approval of this department, and in which you have confidence enough to feel justified in adopting for use on your respective lines.

Yours respectfully,  
JOHN T. RICH,  
Commissioner of Railroads.

[Act No. 182, Session Laws of 1889.]

AN ACT to amend Section one of Article four of Act No. 193, Session Laws of 1873, as amended by Act No. 98, Session Laws of 1875, providing for the use of Air Brakes on Railroad Trains.

SECTION 1. On and after the thirty-first day of October, eighteen hundred and seventy-three, [no] on regular passenger trains shall be run in this State without an air brake or some equally effective device for controlling the speed of the trains, to be approved by the Commissioner of Railroads, which may be applied by the engineer to each car composing the train, and which shall at all times be kept in effective condition of repair and ready for use at the discretion of said engineer. And after the first day of October, one thousand eight hundred and ninety, all locomotive engines and tenders used on the railroads [of] in this State shall be equipped with a suitable driver and tender brake of some pattern to be approved by the Commissioner of Railroads, which said device shall be at all times maintained in effective condition of repair and ready for use, and from and after the said last mentioned date [no] on mixed trains, [composed] composing partly of passenger and partly of freight cars, on which the air brakes hereinbefore mentioned, provided and required, cannot be applied by the engineer to each passenger car which shall be run in this State for the transportation of passengers, unless the engine and tender on such train shall be equipped with a suitable driver and tender brake, as hereinbefore provided; and every company, person or corporation, owning or operating a railroad in this State, which shall permit any trains to be run upon such roads without being equipped with brakes, as provided for in this section, shall forfeit for every train so run the sum of one hundred dollars, for the recovery of which such company, person or corporation shall be liable in an action brought by the Attorney General, or the prosecuting attorney of any county in this State, upon the application of the Commissioner of Railroads, in behalf of the people of the State, the penalty, when recovered, to be paid into the State treasury, and said companies, persons or corporations shall also be liable for all damages which shall be sustained by any person by reason of neglect or refusal to comply with the provisions of this law.

Approved June 21, 1889.

# COMMISSIONER OF RAILROADS.

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[Act No. 311, Session Laws of 1889.]

AN ACT to provide for the better protection of lives of passengers and employes on railroad trains.

SECTION 1. *The People of the State of Michigan enact*, That on and after the first day of November, eighteen hundred and eighty-nine, every railroad company owning or operating any railroad wholly or partly within the State, shall make some effective provision against the burning of cars in which passengers are carried, or of cars which form part of passenger trains, in some one or more of the following, or other equally effective, methods: By generating the heat for warming the cars outside and independent of said cars, or by use of heaters in the cars, so constructed, that in case of accident, it will be practically impossible for the fire to escape from the stove or heater so as to set fire to the cars, or provided with some automatic or quickly and easily operated provision for extinguishing fire, and when the heat is generated outside of the cars, heaters constructed as provided for in this section may be retained within for use in case of emergencies: *Provided*, That the provisions of this section shall not apply to cabooses cars on freight trains.

SEC. 2. No device shall be adopted for general use until approved by the commissioner of railroads, and he shall have the power, and it is hereby made his duty to order any stoves or heaters removed, which, in his judgment, are unsafe in case of accident. And he is hereby empowered to use such reasonable means to provide for carrying out the spirit of this law to promote the safety of passengers and employes in railway cars, as the condition of the road and experience in the use of the various methods of heating have demonstrated to be practicable and necessary.

SEC. 3. The provisions of this act may be enforced by any circuit court of this State in any county through which the railroad of any company refusing to comply with such provisions may run, upon the application of the Commissioner of Railroads under such penalty as the court may determine, of not less than one hundred dollars for each violation of the provisions of this act.

Approved June 28, 1890.

OFFICE OF THE COMMISSIONER OF RAILROADS, }  
Lansing, Mich., June 25. 1890. }

*To General Managers and Superintendents of Michigan Railroads:*

In order to secure more reliable information at this office with regard to the condition and service of the interlockers in use at the different railroad crossings in the State, it is deemed desirable to have monthly reports of the same from both companies whose trains pass through such interlocking.

Commencing with the present month, therefore, you will furnish reports to this office, of the condition and service of every interlocker in this State used by your Company, whether responsible for such condition and service, or otherwise, as prescribed by the instructions printed upon the blanks which will be sent you for the purpose of such reports.

Very truly yours,

JOHN T. RICH,  
*Commissioner of Railroads.*

STATE OF MICHIGAN, }  
OFFICE OF THE COMMISSIONER OF RAILROADS. }

*To General Managers and Superintendents of Railroads in the State of Michigan:*

Application having been made by J. D. Hawks, Chief Engineer of the Michigan Central Railroad Company for the official approval of the Commissioner of Railroads, of the National Surface Cattle Guard, for use on the said Michigan Central Railroad, pursuant to the provisions of Section 15, Act No. 198, of the Session Laws of 1873, and acts amendatory thereof, as amended by Act No. 26, Session Laws of 1889. And the Undersigned, Commissioner of Railroads in and for said State aforesaid, having made a careful examination of said cattle guard, and become fully satisfied of its practical value, and that it meets the requirements of the laws of this State, in accordance with the true spirit and intent thereof.

Therefore, The said National Surface Cattle Guard is hereby approved, and authorized to be used upon all railroads in this State, from and after the date hereof.

*In Witness Whereof*, I have hereunto set my hand, and caused the seal of the department to be affixed at the capitol in the city of Lansing, this 24th day of July, A. D. 1890.

[L. S.]

JOHN T. RICH,  
*Commissioner of Railroads.*

STATE OF MICHIGAN,  
OFFICE OF THE COMMISSIONER OF RAILROADS, }  
Lansing, Mich., November 15, 1890.

To \_\_\_\_\_  
General \_\_\_\_\_  
Of the \_\_\_\_\_ Rail \_\_\_\_\_ Co.

DEAR SIR—

Your attention is respectfully called to the following Proviso in Section 1, of Act No. 147, Laws of 1885, as amended by Act No. 88, Session Laws of 1887, and entitled "An act to provide for the introduction and use on all cars owned and operated by any railroad company or other corporation doing business in this State, of some form of automatic car-coupling, by which all cars may be coupled and uncoupled without the necessity of the brakeman or any other person passing between the cars," to wit:

*"Provided further:* That no freight car shall be run upon any of the railroads within this State, after the first day of January, eighteen hundred and ninety-one, unless furnished with Safety Couplers, as provided by this act."

It is hardly possible that all cars of Michigan Companies will be fully equipped with approved safety couplers by the date provided for in the Act, and certainly it is too much to expect that all the cars of foreign corporations will be so equipped. But there is a class of cars on which the dead-woods or buffers extend both above and below the draw-heads, and which is particularly dangerous to life and limb of train men when making a coupling.

Before issuing a formal order in regard to this important matter, I would be pleased to have your views in writing as to the propriety of requiring all cars of the above-mentioned character to be supplied with the Master Car Builder's type of coupler after the first day of January next.

The penalty under the law can only be enforced upon the application of the Commissioner of Railroads, but with this specially dangerous class of cars in disuse, the Commissioner would, considering the magnitude of the undertaking involved in the equipment of all the cars in the United States and Canada with new draw-bars, feel justified in a less exacting and absolute compliance with the law.

An early reply is respectfully asked as it is my intention to take further action with regard to the matter the first week in December next, unless, meanwhile, sufficient grounds are shown to exist why the same would not be practicable or desirable.

Very truly yours,

JOHN T. RICH,  
Commissioner of Railroads.

## OFFICIAL ORDERS

ISSUED BY THE COMMISSIONER OF RAILROADS OF THE STATE OF  
MICHIGAN FOR THE YEAR ENDING SEPTEMBER 20, 1890.

1889.

1. Nov. 16. To William J. Spicer, general manager of the Chicago & Grand Trunk Ry.  
Special order to erect a residence crossing for one Henry Fall near the village of  
Birmingham within ten days from date.

2. Nov. 23. To H. W. Ashley, general manager of the Toledo, Ann Arbor and North  
Michigan Railway.  
Special order to station and maintain a flagman at crossing of Barnard street in the  
village of Howell within three days from date.

3. Nov. 22. To the general managers of the Chicago & West Michigan Ry. and the  
Flint & Pere Marquette Railroad Companies.  
Special order approving the interlocking and derailing device at the crossing of the  
two roads in the county of Lake.

4. Nov. 22. To the Grand Rapids & Indiana and the Cadillac & Northeastern  
Railroad Companies.  
Special order to erect an interlocking and derailing device of the second class at the  
crossing of the two roads near Cadillac within sixty days from date.

5. Nov. 22. To the Grand Rapids & Indiana Railroad Co. and the Smith Lumber Co.  
Special order approving the interlocking device at the crossing of the two roads near  
Kalkaska.

6. Nov. 27. To the Michigan Central Railroad Lessee of the Detroit & Bay City  
Railroad and the Toledo, Saginaw & Mackinaw Railroad Co.  
Special order to station a flagman at the crossing of Thompson street in the city of  
East Saginaw.

7. Dec. 20. To J. B. Mulliken, vice president and general manager of the Chicago  
& West Michigan Railway Company.  
Special order to station a flagman at the crossing of Fulton street in the city of  
Grand Haven.

8. Dec. 24. To the Michigan Central Company operating the Detroit & Bay City  
Railroad, Lake Shore and Michigan Southern Railway Lessee of the Detroit, Monroe  
& Toledo Railroad, and the Chicago, Detroit & Canada Grand Trunk Junction Ry.  
Special order to erect and maintain safety gates at the crossing of Twelfth street;  
Lincoln and Second avenues in the city of Detroit.

9. Dec. 24. To the Lake Shore & Michigan Southern Ry. Co., operating the Detroit,  
Monroe & Toledo Railroad, and the Chicago, Detroit & Canada Grand Trunk Ry. Co.  
Special order to erect and maintain safety gates at the crossing of Scotten avenue in  
the city of Detroit.

10. Dec. 24. To the Michigan Central Railroad Co. operating the Detroit & Bay City  
Railroad, and the Chicago, Detroit & Canada Grand Trunk Junction Ry. Co.  
Special order to erect and maintain safety gates at the crossing of Milwaukee avenue  
in the city of Detroit.

1890.

11. Jan. 10. To the general superintendents of the St. Louis, Sturgis & Battle Creek and the Cincinnati, Jackson & Mackinaw Railroad Companies.

Special order approving the interlocking and derailing device at the crossing of the two roads near the city of Battle Creek.

12. Jan. 11. To the Cincinnati, Saginaw & Mackinaw, lately the Toledo, Saginaw & Mackinaw Railroad Co., and the Flint & Pere Marquette Railroad Company.

Special order approving the second class interlocking and derailing device at the west side branch of the F. & P. M. R. R., and safety gates at the spur track crossing in the city of East Saginaw.

13. Jan. 11. To the Cincinnati, Saginaw & Mackinaw, lately the Toledo, Saginaw & Mackinaw R. R. Co., and the Michigan Central Railroad Company operating the Detroit & Bay City and the Jackson, Lansing & Saginaw Railroads.

Special order approving the safety appliances at the crossing of the Saginaw branch of the Detroit & Bay City and also of certain spur tracks diverging from the main line of the Jackson, Lansing & Saginaw Railroad at different points in the city of East Saginaw.

14. Jan. 29. To the general managers of the Grand Rapids & Indiana Railroad Company and the Chicago & West Michigan Railway Company.

Special order approving the interlocking and derailing device at the crossing of the main and side tracks of the two roads in the city of Grand Rapids.

15. Feb. 11. To the Cincinnati, Saginaw & Mackinaw Railroad Company, and the Michigan Central Rd. Lessee of the Jackson, Lansing & Saginaw Railroad.

Special order approving the interlocking and derailing device at the crossing of the two roads at Merston's lumber yard, North Saginaw.

16. Feb. 13. To the Toledo, Ann Arbor & North Michigan Ry. to the Flint & Pere Marquette Railroad Companies.

Special order approving the interlocking and derailing switch at the crossing of the two roads in the village of Cadillac.

17. Feb. 28. To the Detroit, Grand Haven & Milwaukee Railway, Toledo, Ann Arbor & North Michigan Railway and the Cincinnati, Saginaw & Mackinaw Railroad Companies.

Special order to station and maintain a flagman at the Main street crossing and an alarm bell at the Oak street crossing of the three roads in the village of Durand.

18. Feb. 28. To Henry B. Ledyard, president and general manager of the Michigan Central Railroad Company, controlling and operating the Michigan Air Line Railroad, and W. J. Spicer, general manager of the Chicago & Grand Trunk Railway Company.

Special order to erect and maintain an interlocking and derailing switch at the crossing of the two roads at the village of Cassopolis.

19. March 7. To the Grand Rapids & Indiana Railroad Company and W. W. Cummer, manager of the Cadillac & Northeastern Railroad Company.

Special order approving the interlocking and derailing apparatus at the crossing of the two roads north of the city of Cadillac.

20. March 12. To P. P. Wright, general superintendent of the Lake Shore & Michigan Southern Railway Company.

Special order approving the interlocking and derailing device at its crossing of its main line with the Fort Wayne & Jackson branch near the village of Jonesville.

21. April 12. To the Lake Shore & Michigan Southern Railroad Company, controlling and operating the Kalamazoo & White Pigeon Railroad, and the Chicago & Grand Trunk Railway Company.

Special order approving the interlocking and derailing device at the crossing of the two roads in the village of Schoolcraft.

22. April 19. To the general managers of the Cincinnati, Saginaw & Mackinaw Railroad Company and the Michigan Central Railroad Company operating the Jackson, Lansing & Saginaw Railroad.

Special order approving the interlocking switch and signal system at the Lafayette street crossing of the two roads in the village of Salzburg.



23. April 19. To the general managers of the Michigan Central Railroad Company operating the Bay City Belt Line Branch of the Detroit & Bay City Railroad, and the Flint & Pere Marquette Railroad Company.

Special order approving the interlocking and derailing service at the crossing between Howard street and Michigan avenue in Bay City.

24. April 29. To the general managers of the Cincinnati, Saginaw & Mackinaw Railroad, Flint & Pere Marquette and Michigan Central Railroad Companies, operating the Jackson, Lansing & Saginaw Railroad.

Special order approving the interlocking and derailing device at the crossing of the three roads on the west side of Saginaw river at Merston.

25. April 30. To the Fort Street Union Depot Company and the Michigan Central Railroad Company.

Special order relative to the construction of the proposed viaduct of the Fort Street Union Depot Company along the line of River street in the city of Detroit.

26. May 1. To Norman Beckley, general manager of the Cincinnati, Wabash & Michigan Railway Company.

Special order to erect and maintain safety gates at the crossing of Main and Front streets in the city of Niles.

27. May 20. To the general managers of the Wabash Railroad Company, the Lake Shore & Michigan Southern Railway Co. controlling and operating the Detroit, Monroe & Toledo, and the Michigan Central Railroad Company controlling and operating the Toledo, Canada Southern & Detroit Railroad.

Special order to erect and maintain an interlocking and derailing switch and signal system at the crossing of the several roads at or near the town of Delray.

28. May 20. To H. B. Ledyard, general manager of the Michigan Central Railroad Company, H. C. Potter, vice president and general manager of the Flint & Pere Marquette and J. T. Gardner, general manager of the Cincinnati, Saginaw & Mackinaw Railroad.

In the matter of the division of the cost of construction and the expenses of maintenance and operation of the interlocking switch at Merstons, Saginaw.

29. June 17. To H. W. Ashley, vice president and general manager of the Toledo, Ann Arbor & North Michigan Railway Co.

Special order requiring certain renewals and repairs to the track between Leland and South Lyons within sixty days from date.

30. June 17. To H. W. Ashley vice president and general manager of the Toledo Ann Arbor & North Michigan Railway Company.

Special order to rebuild the entire right of way fence between the south line of Oakland County and the village of South Lyons.

31. June 18. To H. W. Ashley, vice president and general manager of the Toledo, Ann Arbor & North Michigan Railway Company.

Special orders to rebuild the entire right of way fence between Leland station and the north line of Washtenaw county.

32. June 18. To Charles M. Heald, general manager of the Detroit, Lansing & Northern, and William J. Spicer, general manager of the Chicago & Grand Trunk Railway Company.

Special order approving the interlocking and derailing switch at the crossing of the two roads at Trowbridge station.

33. July 15. To the Chicago & Grand Trunk Railway Company, the Detroit, Grand Haven & Milwaukee, Toledo, Ann Arbor and North Michigan Railway Company and the Cincinnati, Saginaw & Mackinaw Railroad Company.

Special order to erect and maintain an interlocking and derailing switch at the crossing of the several roads in the village of Durand.

34. July 12. To H. B. Ledyard, president and general manager of the Michigan Central Railroad, controlling and operating the Michigan Air Line Railroad, and W. J. Spicer, general manager of the Chicago & Grand Trunk Railway Company.

Special order approving the interlocking and derailing device at the crossing of the two roads at Cassopolis.

35. July 21. To William J. Spicer, General Manager of the Detroit, Grand Haven & Milwaukee Railway Company.

Special order to erect and maintain safety gates at the crossing of Taylor, Quinby and Caledonia streets in the city of Grand Rapids.

36. July 24. To General Managers and Superintendents of Railroads in the State of Michigan.

General order approving the National Surface Guard for use upon all railroads in the State of Michigan.

37. July 31. To William J. Spicer, general manager of the Chicago & Grand Trunk Railway Company.

Special order to erect and maintain a good and sufficient residence crossing over the tracks at Elba station, Lapeer county, for the use of Milo M. Lyons.

38. July 31. To Charles M. Heald, general manager of the Chicago & West Michigan Railway Company.

Special order to erect and maintain safety gates at the crossing of west Fulton street in the city of Grand Rapids within sixty days from date.

39. Sept. 2. To the Toledo Ann Arbor & North Michigan Railway Company operating the Toledo Ann Arbor & Lake Michigan Railroad, Grand Rapids & Indiana Railroad Company and the Cadillac & North Eastern Railroad Company.

Special order to erect and maintain safety gates at the various crossings of the several roads in the city of Cadillac.

40. Sept. 3. To the Chicago & West Michigan Railway Company and the Manistee & North Eastern Railroad Company.

Special order approving the interlocking and derailing device at the crossing of the two roads in Manistee county.

41. Sept. 8. To H. W. Ashley, general manager of the Toledo Ann Arbor & North Michigan Railway Company.

Special order substituting an electric bell for the flagman previously stationed at the Barnard street crossing in the village of Howell.

42. Sept. 19. To the Michigan Central Railroad Company operating the Detroit & Bay City, and the Flint & Pere Marquette Railroad Companies.

Special order approving the interlocking and derailing device at the crossing of the two roads in Bay City.

#### EXPENSE ACCOUNT

*of the Department From October 1, 1889, to September 30, 1890.*

Express charges, distribution of books and blanks .....	\$200 61
Incidentals .....	18 70
Maps of Michigan .....	291 00
Office, library, books, reports and journals .....	89 50
Postage .....	125 00
Printing and binding .....	369 88
Special inspections .....	45 00
Stationery and paper for blanks .....	296 71
Telegraph and telephone .....	130 76
Traveling expenses .....	847 07
Total .....	\$2,414 23

OPINION OF

*Atkinson, Carpenter, Brook and Haigh, (Judge Isaac Marston of Counsel), Upon the Corporate Status of the Lake Shore & Michigan Southern Railroad Company.*

\* \* \* \* \*

In coming to a consideration of the Lake Shore & Michigan Southern Railway we reach certain perplexing questions, and yet an adherence to the fundamental rules which have been laid down by the courts will enable us to attain a satisfactory conclusion.

Before beginning we will say that in three cases has this charter been before our Supreme Court, to wit:

People vs. M. S. & N. I. R. R., 4 Mich., 398.  
M. S. & N. I. R. R., vs. Auditor General, 9 Mich., 448.  
L. S. & M. S. R. R., vs. The People, 46 Mich., 193.

None of these cases, as we understand them, has any direct bearing on the question we are now considering. They are cases somewhat similar to,

Tennessee vs. Whitworth, 117 U. S., 129.

And as such we will not further consider them.

The original charter of the Michigan Southern Railroad was granted in 1846 and, like the Michigan Central charter gave authority to fix tolls, etc., and at,

Sec. 31 p. 166.

limited the tax to a certain percentage on the capital stock. Sec. 37 p. 168 reads,

"The State reserves the right at any time after thirty years from the passage of this act, by a vote of two-thirds of each branch of the legislature to alter, amend or repeal the same: *Provided*, The said company shall be compensated by the State for all damages sustained by reason of such alteration, amendment or repeal."

By act number 138 of the laws of 1855,  
R. R. Laws p. 176,

A consolidation was authorized between the Michigan Southern and the Northern Indiana Railroads and a new corporation was authorized to be formed and all the franchises, property, powers, and privileges enjoyed by the old Michigan Southern Roads were conferred upon the new road, and it was provided further in section 3 that "The said corporation so to be organized, by virtue of this act, shall continue subject to the same rate of tax as though such consolidation should not take place."

We consider that this act is clearly unconstitutional as being an attempt to create a corporation by a special act and so in direct violation of,

Mich., Const. Art. XV, Sec. 1.

That the new road is formed by the consolidation of previously existing roads does not in our opinion change the fact that a new corporation is formed. The constitutional provision makes no exception in favor of corporations formed out of previously existing ones. Nor do I think that section 8 of the same article authorizing amendments to special charters theretofore granted would authorize this. This is not an amendment to the Michigan Southern charter merging the Northern Indiana into it. It operates as a dissolution of both of the old roads and the constitution of an entity which before had no existence. The language of the consolidation act, referring to the "new corporation" the "new company" with "its capital stock," separate and distinct from the old capital stock of the old companies—the distinction between stockholders of the old companies and of the new company indicates clearly that this act is different from a merger of one into the other, as was the case in an act relative to the Detroit & Pontiac road which we shall hereafter consider, or as was the case involved in

Central Railroad vs. Georgia, 92 U. S., 665.

Almost exactly this question under a constitutional provision practically identical arose in Ohio and the court had no hesitation in reaching the conclusion above indicated.

Atkinson vs. Railroad, 15 O. St., 21.

However, the extreme reluctance of a court to overthrow a law which has been acquiesced in so long by all parties has been tacitly approved by the court itself in various tax cases above cited, and upon the faith of which large investments have been made would lead, us to feel considerable doubt as to the possibility of inducing the courts now to adopt this view—for courts often strain the constitution where great damage would be worked by a vigorously correct decision and where so to decide would work a great apparent injustice.

See Attorney General vs. Joy, 55 Mich.

But even if this whole consolidation were illegal it is of little importance, since in any view of the case the old Michigan Southern franchise was abandoned, and no doubt has perished from non-use. In view of subsequent events, this question has merely a speculative interest, and we shall not discuss it here at greater length.

We are then, the more easily led to yield this point since, on other grounds, the present Lake Shore & Michigan Southern Railway can be brought under general laws.

In 1855 a general law was passed (Act No. 82), at which sections 50-52 provides for consolidations of previously existing railroads.

In 1869, while this act was still in full force, the Michigan Southern & Northern Indiana, and the Lake Shore Ry. Co. consolidated under this general law and in 1879 another consolidation was had between the last named company and the Buffalo & Erie R. R. Co., retaining the name of the former company. This last action was taken under 1 Howell's statutes, Secc. 3343-4.

These acts are substantially similar in conferring upon the company formed by such consolidation "all the powers, rights and franchises conferred upon such two or more corporations, and shall be subject to all the restrictions and perform all the duties imposed by the provisions of their respective charters or laws of organization, not inconsistent with the provisions of this act." And various other expressions are contained in them to the same import.

But the essential point is this:—the company formed by this new consolidation has its origin at the date of such consolidation and all its powers, rights and privileges must be measured and controlled by the laws and constitution then in force.

Thus in 1855, 1869 and in 1879, we find the constitution of Michigan provides that "corporations may be formed under general laws \* \* \* all laws passed in pursuance of this section may be altered, amended or repealed."

Mich. Const. Art. XV, Sec. 1.

This general railroad law under which these last consolidations were effected and from which the present Lake Shore & Michigan Southern Railroad derives its very existence as a corporation was passed in pursuance of this section above quoted, and, hence, is subject, by the express language of the constitution to be, at any time, altered, amended, or repealed. It is then unquestionably competent for the legislature now so to amend the present general railroad law as to subject all corporations owing their existence to it, to the general railroad law, regardless of what may have been the legal rights, privileges, exemptions and immunities of the old corporations who, under this act, merged into new ones. Such corporations must be deemed, by virtue of their having availed themselves of the privileges of this act, to have waived their previous immunities from legislative control and to have brought themselves under the section above quoted, *i. e.*, to have consented that for the future they would be willing to allow the legislature to regulate them.

See on this subject

State vs. Sherman, 22 O. St., 411.

Shields vs. Ohio, 260 St. and 95 U. S., 319.

Railway Co., vs. Berry, 113 U. S., 465.

The point might be raised that this general act concerning consolidations is unconstitutional inasmuch as it, in the case of special charter roads consolidating, creates a special class of corporations by reason of its clause authorizing roads to retain their special privileges, etc.

Since these special privileges, after the consolidation, are retained simply until the legislature chooses to change them, we do not think that the law is open to this objection. And see

State vs. Sherman, 22 Ohio St. 411, 430.

Even if it were, we do not think the railroad could raise the point.

Daniels vs. Tearney, 102 U. S., 415, 421.

Further than this, it may be considered established by the Supreme Court of the United States that such language as is used in these general consolidation acts is not broad enough to pass an immunity from taxation, which is, in the legal sense, neither a privilege, franchise or right.

*Cheasapeake Railway vs. Miller*, 114 U. S., 176.

*Morgan vs. Louisiana*, 93 U. S., 217,

However, we do not consider it necessary to urge this point, as the above is, in our view, conclusive.

A BILL to amend the General Railroad Law relative to consolidations, being Sections 29 and 30 of Article II of the Act entitled, "An Act to revise the laws providing for the incorporation of Railroad Companies, and to regulate the running and management, and to fix the duties and liabilities of all railroads and other corporations owning or operating any railroad in this State," approved May 1, 1873, being chapter 91 of Howell's Annotated Statutes, as the same is amended by Act number 174 of the Laws of 1873, approved June 7, 1883, the same being Howell's Sections 3343, 3344 as amended.

*The People of the State of Michigan enact:* That sections twenty-nine and thirty of Article two of an Act entitled, "An Act to revise the laws providing for the incorporation of railroad companies, and to regulate the running and management, and to fix the duties and liabilities of all railroads and other corporations owning or operating any railroad in this State," approved May 1, 1873, being chapter 91 of Howell's Annotated Statutes, as the same is amended by Act number 174 of the Laws of 1883 approved June 7, 1883, be and the same are hereby amended so as to read:—

SECTION 29. Any railroad company in this State, forming a continuous or connected line with any other railroad company, may consolidate with such other company, either in or out of this State, or partly within or partly without this State, into a single corporation: *Provided*, that no such companies owning parallel or competing lines shall be permitted to consolidate themselves into one corporation. The directors of said two or more corporations may enter into an agreement under the corporate seal of each, for the consolidation of said two or more corporations, prescribing the terms and conditions thereof, the mode of carrying the same into effect, the name of the new corporation, the number of directors thereof, and the names of those who shall be the first directors, which shall be deemed and taken to be the first election of the directors of the consolidated company—which number shall not be less than five, nor more than fifteen, the time and place of holding the first election of directors after the consolidation, which time shall not exceed six months after such consolidation has been sanctioned by the stockholders of said two or more corporations, as hereinafter provided: the number of shares of capital stock in the new corporation, the amount of each share, the manner of converting the shares of capital stock in each of said two or more corporations into shares in such new corporation: with such other details as they shall deem necessary to perfect such consolidation of said corporations, and such new corporations shall possess all the powers, rights and franchises conferred upon such two or more corporations: *Provided, However*, that any power, right, franchise, privilege or immunity, possessed by either or any of the consolidating companies of a kind which would not be possessed by a company organizing originally under the provisions of this act as now existing or as hereafter amended shall be utterly lost, annulled and abrogated; and such new corporation shall be subject to all the restrictions and perform all the duties imposed by this act as now existing or as hereafter amended upon companies organizing originally under its provisions and in all respects be governed by the provisions of this Act as now existing or as hereafter amended as if it were a corporation originally organized thereunder. Such agreement of the directors shall not be deemed to be the agreement of the said two or more corporations until after it has been submitted to the stockholders of each of said corporations separately at a meeting thereof, to be called upon a notice by publication at least once in each week for four successive weeks, in one of the daily papers published in the city of Detroit, and some newspaper published in each county in this State through which said roads run, in which a newspaper shall be published; the first publication to be at least sixty days before the time specified for said meeting,

and signed by the secretaries of each of said companies proposing to consolidate, stating the purpose and object of said meeting, and has been sanctioned by such stockholders by a vote of a majority in interest of the stockholders, in person or by proxy, each share of capital stock being entitled to one vote; and when such agreement of the directors has been so sanctioned by each of the meetings of the stockholders separately, in the manner above mentioned, then such agreement of the directors shall be deemed to be the agreement of the said two or more corporations. A copy of said contract or consolidation agreement filed in pursuance of this act, or of an act entitled, "An Act to provide for the incorporation of railroad companies," approved February twelve, eighteen hundred and fifty-five, and the acts amendatory thereof, and the acts amending or revising the same, with the Secretary of State, and certified by him to be a copy, shall in all courts and places be presumptive evidence of the consolidation of said two or more companies, and of all the facts therein stated: *And provided*, that any railroad bridge company, or railroad tunnel company, which may be organized under this act to bridge or tunnel the Detroit river, or the St. Clair river or any of the waters in the jurisdiction of this State, shall have a right to consolidate the stock, property and assets of said company with the stock, property and assets of any company organized or to be organized under the laws of this State or which may be created under the laws of any adjacent State or country, to construct any such bridge or tunnel therewith, upon such terms, conditions and agreements as may by the said two corporations be deemed just and equitable: *Provided*, that every such bridge or tunnel shall be so constructed as not to be a material obstruction to navigation.

SECTION 30. Before the agreement mentioned in the preceeding section (Sec. 29) shall have any force or effect and before filing a duplicate thereof in the office of the secretary of State, the articles of consolidation shall be submitted to a board, consisting of the attorney general, commissioner of railroads, the secretary of State, to be examined by such board, to ascertain, whether the proposed consolidation will be in accordance with the constitution and laws of this State and if found in accordance therewith, said board shall approve the same. Upon such approval by said board a duplicate of the articles of agreement shall be filed in the office of the secretary of State, the said two or more corporations, mentioned or referred to in this section, shall be merged in the new corporation provided for in such agreement, to be known by corporate name therein mentioned, and the details of such agreement shall be carried into effect as provided therein. And all and singular the power, rights and franchises of each and all of such two or more corporations, parties to such agreement, of a kind which would be possessed by a company organized under the provisions of this act as now existing or as hereafter amended, and all and singular their rights and interest in and to every species of property and things in action, shall be deemed to be transferred to and vested in such new corporation without any other deed or transfer; and such new corporation shall hold and enjoy the same, together with all the right of way, and all other rights of property, in the same manner and to the same intent, as if said two or more corporations, parties to such agreement, should have continued to retain the title and transact the business of such corporation, save as above provided, and the titles and real estate acquired by either of said two or more corporations shall not be deemed to revert or be impaired by means of anything in this act contained: *Provided*, That all rights of creditors and all liens upon the property of either of said corporations, parties to the said agreement, shall be and hereby are preserved unimpaired, and the respective corporations shall continue to exist so far as may be necessary to enforce the same: *And Provided further*, That all the debts, liabilities and duties of either company shall thenceforth attach to such new corporation, and be enforced against the same, to the same extent, and in the same manner, as if such debts, liabilities and duties had been originally incurred by it.

A BILL to amend an act entitled, "An Act to revise the laws providing for the incorporation of railroad companies and to regulate the running and management, and to fix the duties and liabilities of all railroad and other corporations owning and operating any railroad in this State," approved May 1, 1873 as subsequently amended, by adding three new sections relative to consolidated roads to stand as sections forty-nine, fifty and fifty-one of Article II of said act.

*The People of the State of Michigan enact*, That there shall be added to the act entitled, "An Act to revise the laws providing for the incorporation of railroad companies and to regulate the running and management, and to fix the duties and liabilities of

all railroad and other corporations owning and operating any railroad in this State," approved May 1st, 1873, three new sections to stand as sections forty-nine, fifty and fifty-one of Article II and read as hereinafter set forth.

SECTION 49. Every railroad and railway company operating a railroad in whole or in part in this State which company may have been by means of a consolidation under any general law of this State or by means of a mortgage foreclosure and sale and reorganization under any general law of this State is hereby declared to be in all respects subject to the general laws of the State respecting railroads as now existing or as hereafter amended; and any franchise, right, power, privilege, immunity, or exemption claimed by any such railroad or railway company of a kind which would not belong to a company organized under the general railroad laws of the State as now existing or as hereafter amended is hereby annulled and abrogated; and every such company shall be subject to all the restrictions and perform all the duties now imposed by the general laws or which may hereafter be imposed upon railroad companies.

SECTION 50. That in case any such railroad or railway company may have been in the past paying a tax different from that imposed upon railroads by the general law, such company may continue to pay such tax or a ratable proportion thereof up to the first day of July, 1892; but thereafter every such company shall pay a tax in the manner and in the amount now provided by the general laws relating to railways.

SECTION 51. That all acts or parts of acts inconsistent with the provisions of this Act are hereby repealed.





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REPORTS  
OF  
RAILROAD COMPANIES  
1889.

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ANNUAL REPORT  
OF THE  
MASON & OCEANA RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed February 1, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, HORACE BUTTERS, Ludington, Mich.  
*Vice President*, RICHARD G. PETERS, Manistee, Mich.  
*Secretary and Treasurer*, M. F. BUTTERS, Ludington, Mich.  
*General Superintendent*, MARTIN McDERMOTT, Ludington, Mich.  
*Chief Engineer*, CHAS. CRAWFORD, Ludington, Mich.

DIRECTORS.

HORACE BUTTERS, Ludington, Mich.  
M. F. BUTTERS, Ludington, Mich.  
WM. H. BUTTERS, Ludington, Mich.  
PAT. O'CONNOR, Ludington, Mich.  
R. G. PETERS, Manistee, Mich.

Terms expire January 9, 1891.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—Aug. 9, 1886.		7
Number of Stockholders at date of last election,	- - - - -	7
Number of Stockholders in Michigan at same date,	- - - - -	7
Amount of full paid stock held in Michigan at same date,	- - - - -	\$150,000 00
Date of annual meeting of Stockholders,—Second Monday in Jan.		
Fiscal year of Company ends,—Dec. 31.		
General offices of the Company are located at Ludington, Mich.		

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -	-	\$39,599 80
Total expenses, including taxes, - - -	\$39,218 10	
Net income, - - - - -		\$381 70
Dividends declared, - - - - -	\$7,413 76	
Balance for the year, - - - - -	\$7,032 06	
Balance (profit and loss) last year, - -	-	7,032 06
	\$7,032 06	\$7,032 06

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$150,000 00
Par value of shares, - - - \$100 00	
No. of shares issued, - - - 1,500 00	
Amount paid in on common, - - - -	\$150,000 00
Total amount paid in, as per books of the Company, - -	150,000 00
Paid in per mile of road owned by Company,	
—Miles - - - - -	\$5,555 55

## ANALYSIS OF DEBT ACCOUNTS.

Funded debt, - - - - -	None
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## UNFUNDED DEBT.

For construction, - - - - -	\$64,611 19
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## RECAPITULATION.

Total unfunded debt, - - - - -	\$64,611 19
Total debt liabilities, - - - - -	\$64,611 19
Amount of debt liabilities per mile of road (27 miles), -	2,393 00
Total amount of stock and debt, - - - - -	\$214,611 19
Stock and debt per mile of road (27 miles), - - - - -	7,948 56

## GENERAL BALANCE SHEET.—Dr.

Construction account, - - - - -	\$164,375 22
Equipment account, - - - - -	47,035 97
	\$211,411 19
Other assets:	
Materials and supplies, - - - - -	\$3,200 00
	3,200 00
Total, - - - - -	\$214,611 19

## MICHIGAN RAILROAD RETURNS.

Dec. 31,

## GENERAL BALANCE SHEET.—Cr.

Capital stock, - - - - -	\$150,000 00
Other liabilities (list as follows):	
Due Butters & Peters S. & L. Co., - - - - -	64,611 19
Total, - - - - -	<u>\$214,611 19</u>

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment, -	\$211,411 19
Average cost per mile of road, not included in sidings (27 miles), - - - - -	7,830 04

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

New rail not used, - - - - -	\$5,480 39
Right of way, - - - - -	112 31
New buildings, - - - - -	53 06
New fences, - - - - -	375 06
Machinery and tools, - - - - -	185 47
New cars, - - - - -	1,182 97
Total charges, - - - - -	<u>\$7,389 26</u>
Total charges to property account as above, - - -	\$7,389 26
Property sold and credited, - - - - -	4,500 00
Net addition to property account, - - - - -	<u>\$2,889 26</u>

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

## Main line and branches:

Local fares, - - - - -	\$5,007 70
Total passenger fares, - - - - -	<u>\$5,007 70</u>
Mails, - - - - -	940 26
Total passenger department earnings, - - - - -	<u>\$5,947 96</u>
Proportion for Michigan, - - - - -	\$5,947 96
Per train mile, - - - - -	31 09
Per mile of road, - - - - -	220 29

## FREIGHT EARNINGS.

## Main line and branches:

Local traffic, - - - - -	\$33,651 84	
Total traffic, - - - - -	\$33,651 84	
Total freight department earnings, - - - - -		\$33,651 84
Proportion for Michigan, - - - - -	\$33,651 84	
Per train mile, - - - - -	1 00	
Per mile of road, - - - - -	1,242 66	
Total transportation earnings, - - - - -	\$39,599 80	
Transportation earnings per mile of road, - - - - -	1,466 66	
Transportation earnings per train mile, - - - - -	74	
Total earnings from operation of road, - - - - -	\$381 70	
Total earnings per mile of road, - - - - -	14 14	
Total earnings per train mile, - - - - -	71	
Proportion of taxable earnings for Michigan, - - - - -	39,599 80	
Total taxable earnings per mile of road in Michigan, - - - - -	1,466 66	
Total income from all sources, - - - - -		\$39,599 80
Proportion of income for Michigan, - - - - -		39,599 80

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track, - - - - -	\$6,172 50
Renewals of ties, - - - - -	600 00
Repairs of bridges, including culverts and cattle guards, - - - - -	896 00
Repairs of fences, road crossings and signs, - - - - -	296 00
Repairs of buildings, - - - - -	349 38
Total, - - - - -	\$8,313 88

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives, - - - - -	\$6,971 40
Repairs of passenger cars, - - - - -	100 00
Repairs of freight cars, - - - - -	2,942 67
Total, - - - - -	\$10,014 07

## CLASS 3.—Conducting Transportation.

Fuel for locomotives, - - - - -	\$6,827 43
Water supply, - - - - -	896 72

Oil and waste, - - - - -	\$896 50
Locomotive service, - - - - -	5,300 00
Passenger train service, - - - - -	1,600 00
Passenger train supplies, - - - - -	460 00
Freight train service, - - - - -	2,890 00
Freight train supplies, - - - - -	362 75
Telegraph expenses (maintenance and operating), - -	100 00
Damages to property and cattle, - - - - -	207 82
Agents and station service, - - - - -	600 00

Total, - - - - -	\$20,141 22
------------------	-------------

## CLASS 4. -General Expenses.

Taxes, - - - - -	\$748 93
Total, - - - - -	\$748 93

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - -	21.19	\$8,313 88
Maintenance of motive power and cars, - -	25.54	10,014 07
Conducting transportation, - - - - -	51.36	20,141 22
General expenses, including taxes, - - -	1.91	748 93

Total operating expenses and taxes, - - -	100.00	\$39,218 10
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Operating expenses and taxes per mile of road,	\$1,452 52
Operating expenses and taxes per train mile run, for trains earning revenue (53,360 miles),	73
Proportion of operating expenses and taxes for Michigan:	
Main line, - - - - -	39,218 10
	<u>39,218 10</u>

Percentage of expenses to earnings, - (99)	
Net earnings per mile of road, - - -	\$1,466 66
Net earnings per train mile, - - - -	74

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Buttersville to Stetson, January 20, 1888.

## MAIN LINE.

	Miles, 100ths.	Miles, 100ths.
In Michigan, from Buttersville to Stetson, - -	27 00	
Total length completed, - - - - -		27 00

## BRANCHES.

Main line to forest terminals, - - - - -	7 00
Total length of branches owned by company, - -	7 00

	Miles, 100ths.	Miles, 100ths.
Total length of branches owned by company in Michigan, - - - - -	7 00	
Total length of road belonging to this company, - - - - -		34 00
Total length of road belonging to this company, in Michigan, - - - - -	34 00	
Aggregate length of tracks in Michigan belonging to this company, computed as single track - - - - -		34 00
Gauge of track, 3 feet.		

	Total Miles, In Michigan.
Total miles of road operated by the company, - - -	34 00 34 00

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of 3; Aggregate length, feet, -	450 00
Total, - - - - - 3; - - - - -	450 00

*Crossings—Railroad and Highway.*

At what crossings are interlocking and derailing switches in operation? None.	
What pattern or patterns have you adopted? None.	
Number of crossings of highways at grade in this State,	11

*Stations.*

Number of stations on whole line, - - - - -	6
Same in Michigan, - - - - -	6

*Employés.*

Number persons regularly employed on all roads operated by company, including officials, - - - - -	40
Same in Michigan, - - - - -	40
Classify your employés as per following list;	

	NUMBER.
Brakemen, - - - - -	7
Conductors, - - - - -	1
Engineers, - - - - -	5
Firemen, - - - - -	5
Laborers, - - - - -	16
Shopmen, - - - - -	4
Yardmen, - - - - -	2

REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - -	16
Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed: - - - - -	11

*Road Bed and Track.*

Number of track sections in Michigan, - - - -	4
Average length of sections (miles), - - - -	7
Average number of men in each section gang, - - - -	4
Number of new ties put in whole line during the year, -	1,000
Number of new ties put in track in Michigan, - - - -	1,000
Average number of new ties per mile of road, - - - -	37

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	3	\$14,000 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender, - - - - -	1	2,000 00
Total, - - - - -	4	\$16,000 00
Number of passenger cars—8-wheel, including official cars, - - - - -	1	700 00
Number of express and baggage cars, - - - - -	1	500 00
Number of box freight cars, - - - - -	2	400 00
Number of platform cars, - - - - -	64	11,772 97
Number of log cars, - - - - -	80	14,400 00
Other cars, - - - - -	11	2,850 00
Total, - - - - -	173	\$62,622 97
Number of locomotives equipped with power brakes, - - - - -	2	
What patterns of power breaks have you in use, and number of locomotives and cars with each? Ratchet hand chain and wheel.		
Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? No.		
What pattern or patterns have you adopted for use? Link and pin.		
How are your passenger cars heated? Coal heater.		

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year, - -	19,710
Miles run by freight trains during the year, - -	33,650
Total miles of trains earning revenue, - - - -	53,360



*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Number of local passengers carried, -	10,670		
Total number of passengers carried, -	10,670		
Total passenger mileage, or passengers carried one mile, -		149,380	
Average distance traveled by each passenger, -		14	
Average amount received from each passenger, -			47
Average rate of fare per mile for local passengers, -			03
Average rate of fare per mile for all passengers, -			03
Number of tons of local freight carried, -	70,600		
Total tons of freight carried, -	70,600		
Total mileage of local freight, -		1,412,000	
Total freight mileage, or tons carried one mile, -		1,412,000	
Average ton haul for local freight, -		20	
Average ton haul for all freight, -		20	
Average amount received for each ton haul, -			47
Average rate per ton per mile, received for local freight, -			2.3
Average rate per ton per mile, received for all freight, -			2.3

*Freight Forwarded at Michigan Stations.*

	Forwarded Tons.
Grain, - - - - -	572
Flour, - - - - -	80
Provisions (beef, pork, lard, etc.), - - - - -	90
Animals, - - - - -	10
Other agricultural products, - - - - -	5
Lumber and forest products, - - - - -	69,171
Coal, - - - - -	5
Plaster, lime and cement, - - - - -	20
Salt, - - - - -	45
Petroleum, - - - - -	27
Railroad iron, iron and steel rails, - - - - -	60
Other iron and castings, - - - - -	5
Stone, brick and sand, - - - - -	10
Merchandise and other articles not enumerated above, - - - - -	500
Total forwarded, - - - - -	70,600

*Tonnage of Articles Transported.—Entire Road.*

	Tons.
Grain, - - - - -	572
Flour, - - - - -	80
Provisions (beef, pork, lard, etc.), - - - - -	90
Animals, - - - - -	10
Other agricultural products, - - - - -	5
Lumber and forest products, - - - - -	69,171

	Tons.
Coal,	5
Plaster, lime and cement,	20
Salt,	45
Petroleum,	27
Railroad iron, iron and steel rails,	60
Other iron and castings,	5
Stone, brick and sand,	10
Merchandise and other articles not enumerated above,	500
Total tons carried,	70,600

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

None.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
27 miles of telephone line belongs to road.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

Jan. 11. Miss Anna Bushaw, school girl, Fern, carelessness on her part; coroner's jury exonerated railroad from all blame.

Nov. 2. Chas. Larson, brakeman, Township of Crystal, purely accidental; coroner's jury returned verdict, without fault of any person or persons.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.
Collisions.....						
Coupling cars.....		1				
Deraillments.....						
Falling from trains.....						
Frogs.....						
Getting on and off trains.....						
Highway crossings.....			1			
Miscellaneous.....						
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on tracks.....						
Total.....		1	1			

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	2
Number of persons injured during the year,	—
Number of casualties purely accidental,	1
Number resulting from lack of caution, carelessness, or misconduct,	1
Persons killed or injured while intoxicated,	—
Trespassers and tramps killed or injured,	—
Suicides,	—

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....	—	—	—
Brakemen.....	1	—	1
Conductors.....	—	—	—
Engineers.....	—	—	—
Firemen.....	—	—	—
Laborers.....	—	—	—
Shopmen.....	—	—	—
Yardmen.....	—	—	—
Not classified above.....	—	—	—
Total.....	1	—	1

STATE OF MICHIGAN, )  
COUNTY OF MASON, ) ss.

M. F. Butters, Sec'y and Treas. of the Mason & Oceana Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this Company, and having carefully examined the same, declares them to be a true, full, and correct statement of the condition and affairs of said Company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

M. F. BUTTERS,

Sec'y M. &amp; O. R. R.

Subscribed and sworn to before me this 30th day of January, A. D. 1890.

WM. H. BUTTERS,

[L. S.]

Notary Public.

ANNUAL REPORT.  
OF THE  
CHICAGO & NORTHWESTERN RAILWAY COMPANY.

*For the Year ending December 31, 1889.*

[Filed March 4, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*Chairman of the Board*, ALBERT KEEP, Chicago, Ill.  
*President*, MARVIN HUGHITT, Chicago, Ill.  
*Vice President*, M. L. SYKES, New York, N. Y.  
*Second Vice President*, M. M. KIRKMAN, Chicago, Ill.  
*Secretary*, M. L. SYKES, New York, N. Y.  
*Auditor*, J. B. REDFIELD, Chicago, Ill.  
*Treasurer*, M. L. SYKES, New York, N. Y.  
*General Manager*, J. M. WHITMAN, Chicago, Ill.  
*General Superintendent*, S. SANBORN, Chicago, Ill.  
*Assistant General Superintendent*, PETER HALLENBECK, Winona, Minn.  
*Division Superintendent in Michigan*, W. B. LINSLEY, Escanaba, Mich.  
*Chief Engineer*, JNO. E. BLUNT, Chicago, Ill.  
*Superintendent of Telegraph*, G. H. THAYER, Chicago, Ill.  
*General Passenger Agent*, E. P. WILSON, Chicago, Ill.  
*General Freight Agent*, H. R. McCULLOUGH, Chicago, Ill.  
*General Counsel*, W. C. GOUDY, Chicago, Ill.

DIRECTORS.

W. L. SCOTT, Erie, Pa.  
 PERCY R. PYNE, New York, N. Y.  
 F. W. VANDERBILT, New York, N. Y.  
 W. K. VANDERBILT, New York, N. Y.  
 H. McK. TROMBLY, New York, N. Y.  
 JOHN I. BLAIR, Blairstown, N. J.

Terms expire June 1890.

A. G. DULMAN, New York, N. Y.  
 DAVID P. KIMBALL, Boston, Mass.  
 CHAUNCEY M. DEPEW, New York, N. Y.  
 SAM'L F. BARGER, New York, N. Y.  
 ALBERT KEEP, Chicago, Ill.  
 M. L. SYKES, New York, N. Y.

Terms expire June, 1891.

HORACE WILLIAMS, Clinton, Iowa.  
 FRED'K L. AMES, Boston, Mass.  
 JOHN M. BURKE, New York, N. Y.  
 M. HUGHITT, Chicago, Ill.  
 N. K. FAIRBANK, Chicago, Ill.

Terms expire June, 1892.

### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—June 7, 1859.

Number of Stockholders at date of last election,	- - - - -	3,395
Number of Stockholders in Michigan at same date	- - - - -	13
Amount of full paid stock held in Michigan at same date,	- - - - -	\$93,000 00

Date of annual meeting of Stockholders,—First Thursday in June.

Fiscal year of Company ends,—May 31.

General offices of the Company are located at Chicago, Ill.

### GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income,	- - - - -	\$26,185,280 82
Total expenses, including taxes,	\$16,307,710 37	
Net income,	- - - - -	\$9,877,570 45
Interest on funded and unfunded debt,	\$5,544,927 12	
Sinking funds,	202,570 00	
Balance applicable to dividends,	- - - - -	4,130,073 33
Dividends declared:		
6 per cent on common,	\$1,881,894 00	
7 per cent on preferred,	1,562,610 00	
		3,444,504 00
Balance for the year,	- - - - -	\$685,569 33
Balance (profit and loss) last year,	- - - - -	5,836,720 61
Receipts from investments are kept in interest account.		
Balance forwarded to next year,	\$6,522,289 94	
	\$6,522,289 94	\$6,522,289 94

### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association. No fixed amount.

Par value of shares, - - - \$100 00

Common stock outstanding

(including stock of pro-

prietary railroads),

\$52,489,865 97

Preferred stock outstanding,

22,325,454 56

Total amount outstanding including stock of proprietary railroads, as per books of the Company,

\$74,815,320 53

Paid in per mile of road,—Miles, 4,250.38,

\$17,602 03

## FUNDED DEBT.

Class, Character, and Date of Issue.	When Due.	Interest.		Amount.
		Rate.	Payable.	
Peninsula R. R., July 1, 1883.....	Sept. 1, 1898.....	7%	Mar. 1 and Sept. 1.	\$152,000
Consol. Sinking Fund, Jan. 16, 1865.....	Feb. 1, 1915.....	7%	{ Feb. 1 and May 1 } { Aug. 1 and Nov. 1 }	12,747,000
Chicago & Milwaukee R'y, July 1, 1883.....	July 1, 1898.....	7%	Jan. 1 and July 1.	1,700,000
Milwaukee & Madison R'y, Sept. 1, 1880.....	Sept. 1, 1905.....	6%	Mar. 1 and Sept. 1.	1,800,000
Chicago & Tomah, Sept. 1, 1880.....	Nov. 1, 1905.....	6%	May 1 and Nov. 1.	1,528,000
Chicago, Milwaukee & N. W. R'y, May 1, 1882.....	Nov. 1, 1905.....	6%	May 1 and Nov. 1.	750,000
Northwestern Union R'y, June 1, 1872.....	June 1, 1917.....	7%	Mar. 1 and Sept. 1.	3,500,000
Madison Extension, April 1, 1871.....	April 1, 1911.....	7%	Apr. 1 and Oct. 1.	3,150,000
Menominee Extension, June 1, 1871.....	June 1, 1911.....	7%	June 1 and Dec. 1.	2,697,000
General Consol. Gold, Nov. 30, 1872.....	Dec. 1, 1902.....	7%	June 1 and Dec. 1.	12,336,000
Menominee River R. R., July 1, 1876.....	July 1, 1906.....	7%	Jan. 1 and July 1.	400,000
Menominee River Extension, July 1, 1880.....	July 1, 1906.....	7%	Jan. 1 and July 1.	160,000
Escanaba & Lake Superior R'y, July 1, 1881.....	July 1, 1901.....	6%	Jan. 1 and July 1.	720,000
Consol. S. F. of 1879, Oct. 1, 1879.....	Oct. 1, 1929.....	6%	April 1 and Oct. 1.	6,305,000
Consol. S. F. of 1879, Oct. 1, 1879.....	Oct. 1, 1929.....	5%	April 1 and Oct. 1.	8,016,000
S. F. Debentures of 1883, May 1, 1883.....	May 1, 1883.....	5%	May 1 and Nov. 1.	10,000,000
Debentures of 1909, July 1, 1894.....	Nov. 1, 1909.....	5%	May 1 and Nov. 1.	4,000,000
Chicago, Iowa & Nebraska, August 15, 1862.....	Aug. 15, 1892.....	7%	Feb. 15 and Aug. 15.	129,000
C. R. & M. R., 1st Division, August 1, 1861.....	Aug. 1, 1891.....	7%	Feb. 1 and Aug. 1.	700,000
C. R. & M. R., 2d Division, August 1, 1863.....	Aug. 1, 1894.....	7%	Feb. 1 and Aug. 1.	582,000
C. R. & M. R., 3d Division, May 1, 1866.....	May 1, 1916.....	7%	May 1 and Nov. 1.	2,332,000
C. R. & M. R., 7% of 1884, June 1, 1884.....	July 1, 1909.....	7%	June 1 and Dec. 1.	789,000
Maple River R. R., July 1, 1877.....	July 1, 1897.....	7%	Jan. 1 and July 1.	402,500
W. & St. P. R. R., 2d, Nov. 1, 1867.....	Nov. 1, 1907.....	7%	May 1 and Nov. 1.	1,592,000
W. & St. P. R. R., Extension Gold, Dec. 1, 1871.....	Dec. 1, 1916.....	7%	June 1 and Dec. 1.	4,241,000
Minn. Valley R'y, Oct. 1878.....	Oct. 1, 1908.....	7%	April 1 and Oct. 1.	150,000
Roch. & North Minn. R'y, Sept. 1, 1878.....	Sept. 1, 1908.....	7%	Mar. 1 and Sept. 1.	200,000
Plainview R. R., Sept. 1, 1878.....	Sept. 1, 1908.....	7%	Mar. 1 and Sept. 1.	100,000
Dakota Central R'y, (W. & St. P. Con.) May 1, 1882.....	Sept. 1, 1907.....	6%	Mar. 1 and Sept. 1.	1,065,000
Dakota Central R'y, (Southeast Div.) Nov. 1, 1882.....	Nov. 1, 1907.....	6%	May 1 and Nov. 1.	2,000,000
Iowa Midland R'y, August 1, 1870.....	Oct. 1, 1900.....	6%	April 1 and Oct. 1.	1,350,000
Ott. C. F. & St. Paul R'y, March 1, 1884.....	Mar. 1, 1909.....	5%	Mar. 1 and Sept. 1.	1,600,000
Des Moines & Minneapolis R. R., February 1, 1882.....	Feb. 1, 1909.....	7%	Feb. 1 and Aug. 1.	600,000
Northern Illinois R'y Co., April 1, 1885.....	Mar. 1, 1910.....	5%	Mar. 1 and Sept. 1.	1,500,000
C. & N. W. R'y, Extension of 1886, April 15, 1886.....	Aug. 15, 1926.....	4%	Feb. 15 and Aug. 15.	15,912,000
Total funded debt.....				\$104,985,500

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For Construction.....		
For Equipment.....		
For Real Estate (coal lands).....	Will probably be paid in cash.....	\$125,000 00
For Renewals.....		
For Miscellaneous.....		
For Current Balances.....	Will probably be paid in cash.....	4,506,885 27
Total Unfunded Debt.....		\$4,631,885 27

## RECAPITULATION.

Total funded debt,	\$104,985,500 00
Total unfunded debt	4,631,885 27
Total debt liabilities,	\$109,617,385 27

Amount of debt liabilities per mile of road (4,250.38 miles),	\$25,790 02
Total amount of stock and debt,	\$184,432,705 80
Stock and debt per mile of road (4,250.38 miles),	43,392 05

## GENERAL BALANCE SHEET.--DR.

Construction account (including proprietary lines),	\$135,430,684 54	
Equipment account (including proprietary lines),	27,117,850 64	
Other investments (specifying same):		
Consol. S. F. Cy. bond on hand,	\$1,000 00	
Cost of \$114,000 C. & N. W. R'y 5% bonds of 1879 on hand,	121,980 00	
Clifton Hights Land Company's bond on hand,	7,638 89	
C. I. & D. R'y 1st mortgage bonds on hand,	33,000 00	
F. E. & M. V. Consol. 6% bonds and Wyo. Cent. R'y 1st m't'g bonds held as collateral for C. & N. W. R'y 4% Ext. bonds of 1886,	11,015,000 00	
Land Grant Investments,	299,000 00	
Cost of securities, sundry proprietary companies,	62,500 00	
Cost of stock of S. C. & P. R'y Co.,	21,013 50	
Cost of stock of Sioux City Bridge Co.,	2,400 00	
Cost of stock of M. V. & B. R'y & B. Co.,	37,000 00	
Cost of stock of Wyoming Central R'y Co.,	15,000 00	
Cost of stock of Consolidated Coal Co.,	185,000 00	
Cost of stock of F. E. & M. V. R. R. Co.,	1,966,500 00	
Cost of stock of C. St. P. M. & O. R'y (147,000 shares),	10,315,659 90	
	<u>24,082,692 29</u>	
		\$186,631,227 47
Cash Items:		
Cash,	\$3,254,099 23	
Bills receivable,	32,010 42	
Due from agents,	1,047,546 29	
	<u>4,333,655 94</u>	

## Other assets:

Materials and supplies, - - - - -	\$1,595,706 15	
Debit balances from companies and individuals, - - - - -	477,333 33	
	<hr/>	\$2,073,039 48
Total, - - - - -		\$193,037,922 89

## GENERAL BALANCE SHEET.—CR.

Capital stock including stock of proprietary companies, -	\$74,815,320 53	
Funded debt, - - - - -		104,985,500 00
Unfunded debt:		
Interest unpaid, - - - - -	\$1,591,110 98	
Dividends unpaid, - - - - -	34,051 90	
Notes payable, - - - - -	125,000 00	
Vouchers and accounts, - - - - -	2,881,723 29	
	<hr/>	4,631,885 27
Other liabilities (list as follows):		
Land income account, - - - - -		1,830,896 25
Income account consolidation Coal Co., - - - - -		116,030 90
R. R. income account—C. & N. W. Ry., 5% S. F. bonds of 1879, redeemed and canceled, - - - - -		136,000 00
Profit and loss or income accounts, - - - - -		6,522,289 94
	<hr/>	\$193,037,922 89

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built and Purchased by Company, Including Cost of the Proprietary Lines Embraced in this Report.*

Total expense for construction and equipment, -	\$162,548,535 18	
Average cost per mile of road (not included in sidings —4,250.38 miles), - - - - -		38,243 29
Proportion of cost for Michigan, - - - - -		14,591,727 30

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN MINE.

Lands, extensions and new sidings, - - - - -	\$659,178 31	
Second track, - - - - -	265,480 22	
New buildings and bridges, - - - - -	375,607 44	
New fences and road crossings, - - - - -	62,358 43	
Machinery and tools, - - - - -	15,006 47	
New cars, - - - - -	82,695 01	
	<hr/>	
Total, - - - - -		\$1,460,334 88
Total charges to property account as above, -	\$1,460,334 88	
Credits to property account, - - - - -	92,014 27	
	<hr/>	
Net addition to property account, - - - - -		\$1,368,320 61



## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

	Local Fares.	Through Fares.	Total Passenger Fares.	Express and Baggage.	Mails.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
<b>cc</b> Main Line and Branches (Consolidated Road).....				\$3,598,056 79	\$387,525 50	\$4,200,247 97	\$3,350,880 26		
<i>Leased or Proprietary Roads.</i>									
Toledo & Northwestern R'y.....			178,728 06	10,117 05	89,148 26	227,988 99			
Winona & St. Peter R. R.....	\$6,006,148 56	\$376,058 95	332,823 45	13,065 35	49,889 74	394,278 54		\$1 10.17	\$1,728 88
Dakota Central R'y.....			270,045 78	21,146 43	72,519 17	363,541 98			
Princeton & Western R'y.....			2,221 12		702 26	2,923 88			
Iron River R'y, Jan. 1 to June 10, 1889.....			5,961 48	835 90	628 10	7,420 48			
Lake Geneva & State Line R'y, Jan. 1 to June 10, 1889.....			1,179 55			1,179 55			
			190 68	44 20		234 88			
* Total Passenger Department Earnings	\$6,006,148 56	\$376,058 95	\$6,384,207 51	\$382,734 43	\$581,455 52	\$7,348,397 46	\$659,654 21	\$1 10.17	\$1,728 88

## FREIGHT EARNINGS.

	Local Traffic.	Through Traffic.	Total Traffic.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
<b>Main Line and Branches, (Consolidated Road).....</b>							
<i>Leased or Proprietary Roads.</i>							
Toledo & North Western R'y.....			1,098,913 72	1,098,913 72			
Winona & St. Peter R. R.....	\$17,394,449 24	\$1,202,241 25	1,076,829 05	1,076,829 05		\$1 40.69	\$4,375 80
Dakota Central R'y.....			524,116 55	524,116 55			
Princeton & Western R'y.....			10,007 80	10,007 80			
Iron River R'y, January 1 to June 10, 1889.....			14,857 68	14,857 68			
Lake Geneva State Line R'y, Jan. 1 to June 10, 1889.....			5,820 74	5,820 74			
			30 58	30 58			
* Total Freight Department Earnings	\$17,394,449 24	\$1,202,241 25	\$18,596,690 49	\$18,596,690 49	\$1,669,395 97	\$1 40.69	\$4,375 80

\* The distinction as between "Local" and "Through" is here made in accordance with the order of the Commissioner in Circular of February 21, 1886.

Total transportation earnings,	-	-	-	\$25,945,078	95
Transportation earnings per mile of road,	\$6,104	18			
Transportation earnings per train mile,		1	30.46		
Miscellaneous receipts from operating account,					
other than for transportation, as follows:					
From rentals of tracks or terminals,	\$34,536	74			
From other sources,	205,656	13			
Total,	-	-	-	\$240,192	87

Distribution of miscellaneous earnings between main line and leased or proprietary roads:

Company:					
Main line (consolidated road)	-	-	-	\$212,072	21
Toledo & North Western R'y,	-	-	-	7,063	39
Winona & St. Peter R. R.,	-	-	-	13,004	86
Dakota Central R'y,	-	-	-	7,882	05
Princeton & Western R'y,	-	-	-	51	51
Iron River R'y, January 1 to June 10, 1889,	-	-	-	108	27
Iron Range R'y, January 1 to June 10, 1889,	-	-	-	10	54
Lake Geneva & St. Line R'y, January 1 to June 10, 1889,	-	-	-	04	
Total miscellaneous earnings,	-	-	-	\$240,192	87
Total earnings from operation of road	-	-	-	\$26,185,280	82
Total earnings per mile of road,	-	-	-	6,160	69
Total earnings per train mile,	-	-	\$1 31.67		
*Proportion of earnings for Michigan,	-	-	-	2,350,611	92
Total proportional earnings per mile of road in Michigan,	-	-	-	6,160	69
Total income from all sources,	-	-	-	\$26,185,280	82
Proportion of income for Michigan,	-	-	-	2,350,611	92

\* The "Proportion of Earnings for Michigan," as given above is found by proportion as follows:  
 Average number of miles operated the entire year by the C. & N. W. R'y Co. .... 4,250.38  
 Gross earnings of all miles operated ..... \$26,185,280 82  
 Average miles operated in Michigan ..... 381.55  
 Giving proportion for Michigan ..... \$2,350,611 92

To enable the State of Michigan to compute a tax in accordance with Section 3, Article 8, of Act No. 174 approved June 7, 1888, a further report is herewith made as follows:

#### CHICAGO & NORTHWESTERN RAILWAY.

The length of road actually consolidated and represented by the capital stock of the Chicago and Northwestern Railway Company is 2,678.72 miles, of which the average number of miles operated as consolidated road 12 months is 2,643.73, and the number of miles of such road operated in the State of Michigan is 381.55, and the average miles operated as consolidated road in Michigan 12 months is 351.21.

Using the average miles of consolidated road with the gross earnings thereof the proportion for Michigan is found as follows:

Average miles of consolidated road operated 12 months	2,643.73
Gross earnings of consolidated road	\$22,439,517 34
Average miles operated in Michigan	351.21
Giving proportion of earnings for Michigan	\$2,997,851 31

#### IRON RIVER LINE (ALL IN MICHIGAN).

Property and franchises sold to C. & N. W. R'y Co., June 10, 1889. The following report covers the period January 1 to June 10, 1889. The length of road represented by the capital stock of the Iron River Railway Company was 35.16 miles, of which the average number of miles operated 12 months was 15.51.

Total gross earnings (January 1 to June 10, 1889)	\$21,886 43
Proportion for Michigan	All.

#### IRON RANGE LINE (ALL IN MICHIGAN).

Property and franchises sold to C. & N. W. R'y Co., June 10, 1889. The following report covers the period January 1 to June 10, 1889. The length of road represented by the capital stock of the Iron Range Railway Company was 33.63 miles, of which the average number of miles operated 12 months was 14.38.

Total Gross earnings (January 1 to June 10, 1889)	\$7,010 88
Proportion for Michigan	All.

## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track, - - - - -	\$1,833,484	61
Renewals of rails, - - - - -	152,032	82
Renewals of ties, - - - - -	427,279	32
Repairs of bridges, including culverts and cattle guards, -	392,460	50
Repairs of fences, road crossings, and signs, -	187,092	43
Repairs of buildings, - - - - -	447,988	89
Total, - - - - -	\$3,440,338	57

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives, - - - - -	\$1,002,073	91
Repairs of passenger cars, - - - - -	342,698	11
Repairs of freight cars, - - - - -	892,505	61
Total, - - - - -	\$2,237,277	63

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	\$1,873,800	85
Water supply, - - - - -	107,694	62
Oil and waste, - - - - -	179,202	35
Locomotive service, - - - - -	1,791,135	01
Passenger train service, - - - - -	372,723	32
Passenger train supplies, - - - - -	100,266	37
Mileage of passenger cars, - - - - -	16,043	94
Freight train service, - - - - -	934,676	89
Freight train supplies, - - - - -	33,370	20
Mileage of freight cars, - - - - -	114,745	57
Telegraph expenses (maintenance and operating), -	371,616	01
Damage and loss of freight and baggage, - - - - -	68,482	90
Damages to property and cattle, - - - - -	32,860	70
Personal injuries, - - - - -	234,567	20
Agents and station service, - - - - -	2,240,817	17
Station supplies, - - - - -	86,796	58
Total, - - - - -	\$8,558,799	68

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company, - - -	\$175,572	19
Salaries of clerks in general offices, - - - - -	296,886	47
Law expenses, - - - - -	109,226	62
Insurance, - - - - -	1,774	92
Stationery and printing, - - - - -	184,093	32
Outside agencies and advertising, - - - - -	301,044	01
Contingencies, - - - - -	238,629	71
Taxes, - - - - -	764,067	25
Total, - - - - -	\$2,071,294	49

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - -	21.10	\$3,440,338 57
Maintenance of motive power and cars, -	13.72	2,237,277 63
Conducting transportation, - -	52.48	8,558,799 68
General expenses, including taxes, - -	12.70	2,071,294 49
Total operating expenses, and taxes, -	100.00	\$16,307,710 37
Operating expenses and taxes per mile of road, - - - - -		\$3,836 76
Operating expenses and taxes per train mile run, for trains earning revenue (19,887,770 miles), - - - - -	82	
Total proportion of expenses and taxes for Michigan, - - - - -		\$1,463,917 79
Percentage of expenses and taxes to earnings, (62.28).		
Net earnings per mile of road, - - - -	2,323 93	
Net earnings per train mile, - - - - -	49.67	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

Termini.	When Built.	Miles.
Escanaba to Negaunee.....	In 1864.....	62.00
Negaunee to Junct. beyond Ishpeming.....	In 1864.....	4.58
Marinette to Escanaba.....	In 1872.....	64.65
Powers to Quinnesec.....	In 1877.....	24.71
Quinnesec to Menominee River.....	In 1880.....	8.13
Second crossing of Menominee River to Crystal Falls.....	In 1882.....	12.20
Iron River Junction to Stambaugh.....	In 1882.....	19.50
Narenta to Metropolitan.....	In 1882.....	34.86
Iron River to Watersmeet.....	In 1887.....	35.16
Junction near Ishpeming to Republic.....	In 1888.....	21.96
Clowry to Michigamme.....	In 1888.....	10.44
Wabik to Champion.....	In 1888.....	1.22
Branches to mines:		
Off Main Line.....	At various dates.....	42.27
Off Menominee R. R. R. Line.....	At various dates.....	31.42
Off Escanaba & Lake Superior Line.....	At various dates.....	8.44
Total.....		381.55

## MAIN LINE OR CONSOLIDATED ROAD.

*Road Belonging to the Chicago & Northwestern Railway Company.*

Divisions.	Total.	Illinois.	Iowa.	Wisconsin.	Michigan.	Minnesota.	South Dakota.	North Dakota.
Lines chartered as or consolidated with Chicago & Northwestern R'y Co.:								
Chicago to Council Bluffs.....	491.00	137.88	\$58.12	-----	-----	-----	-----	-----
Chicago to Freeport.....	121.00	121.00	-----	-----	-----	-----	-----	-----
Geneva to Aurora.....	9.40	9.40	-----	-----	-----	-----	-----	-----
Geneva to St. Charles.....	2.40	2.40	-----	-----	-----	-----	-----	-----
Sycamore to Courtland.....	4.64	4.64	-----	-----	-----	-----	-----	-----
Elgin to Williams Bay.....	51.04	35.82	-----	15.22	-----	-----	-----	-----
Belvidere to Spring Valley.....	75.78	75.78	-----	-----	-----	-----	-----	-----
South Br. Junct. to River (Chicago).....	4.50	4.50	-----	-----	-----	-----	-----	-----
Clinton to Anamosa (Quarry).....	73.57	-----	73.57	-----	-----	-----	-----	-----
Stanwood to Tipton.....	8.50	-----	8.50	-----	-----	-----	-----	-----
Cut off near Cedar Rapids.....	5.96	-----	5.96	-----	-----	-----	-----	-----
Des Moines to T. & N. W. Con.....	57.34	-----	57.34	-----	-----	-----	-----	-----
Belle Plaine to Muchakinock.....	64.00	-----	64.00	-----	-----	-----	-----	-----
Boon to Coal Banks.....	3.25	-----	3.25	-----	-----	-----	-----	-----
Maple River Junct. to Onawa.....	80.85	-----	80.85	-----	-----	-----	-----	-----
Wall Lake to Merville.....	79.87	-----	79.87	-----	-----	-----	-----	-----
Carroll to Kirkman.....	34.81	-----	34.81	-----	-----	-----	-----	-----
Manning to Audubon.....	17.00	-----	17.00	-----	-----	-----	-----	-----
Chicago to Ft. Howard.....	242.20	69.78	-----	172.47	-----	-----	-----	-----
Appleton Water Power Expansion.....	8.63	-----	-----	3.63	-----	-----	-----	-----
Kenosha to Rockford.....	72.10	44.08	-----	28.07	-----	-----	-----	-----
Chicago to Montrose.....	5.20	5.20	-----	-----	-----	-----	-----	-----
Chicago to Milwaukee.....	85.00	44.60	-----	40.40	-----	-----	-----	-----
Milwaukee to Fond-du-Lac.....	62.63	-----	-----	62.63	-----	-----	-----	-----
Sheboygan to Princeton.....	78.40	-----	-----	78.40	-----	-----	-----	-----
Milwaukee to Montfort.....	140.88	-----	-----	140.88	-----	-----	-----	-----
Montfort to Galena.....	46.34	10.30	-----	36.04	-----	-----	-----	-----
Montfort to Woodman.....	30.50	-----	-----	30.50	-----	-----	-----	-----
Ipswich to Plattville.....	4.00	-----	-----	4.00	-----	-----	-----	-----
Lancaster Junct. to Lancaster.....	12.04	-----	-----	12.04	-----	-----	-----	-----
Ganesville to Afton.....	6.10	-----	-----	6.10	-----	-----	-----	-----
Belvidere to Winona.....	227.00	21.00	-----	206.87	-----	.13	-----	-----
Winona Junct. to La Crosse.....	3.96	-----	-----	3.96	-----	-----	-----	-----
Trampealean to Galesville.....	6.71	-----	-----	6.71	-----	-----	-----	-----
Evansville to Janesville.....	15.68	-----	-----	15.68	-----	-----	-----	-----
Ft. Howard to Republic.....	202.64	-----	-----	49.45	153.19	-----	-----	-----
Clowry to Michigamme.....	10.44	-----	-----	-----	10.44	-----	-----	-----
Wabik to Champion.....	1.23	-----	-----	-----	1.23	-----	-----	-----
Powers to Watersmeet.....	104.33	-----	-----	13.73	90.60	-----	-----	-----
Stager to Crystal Falls.....	9.10	-----	-----	-----	9.10	-----	-----	-----
Naranta to Metropolitan.....	34.86	-----	-----	-----	34.86	-----	-----	-----
Branches to mines:								
Off Main Line.....	42.27	-----	-----	-----	42.27	-----	-----	-----
Off E. & L. S. Line.....	8.44	-----	-----	-----	8.44	-----	-----	-----
Off Menominee River Line.....	36.13	-----	-----	4.71	31.42	-----	-----	-----
Total.....	2,676.72	586.28	778.27	990.49	381.55	.13	-----	-----

	Miles. 100ths.	Miles. 100ths.
Total length of road belonging to this company,	-	2,676.72
Total length of road belonging to this company in Michigan,	381.55	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated, approximate,	87.47	
Aggregate length of tracks in Michigan belonging to this company, computed as single track, approximate,	469.02	
Gauge of track in Michigan, 4 feet 8½ inches.		

*Proprietary or Leased Roads Operated by this Company.*

Name, description and length of each:

Proprietary Lines.	Total.	Illinois.	Iowa.	Wisconsin.	Michigan.	Minnesota.	South Dakota.	North Dakota.
Princeton & Western Railway.....	16.06			16.06				
Valley Junct. to Necedah.....								
Toledo & Northwestern Railway.....	885.19							
Tama to Elmore.....			164.22			.34		
Jewell Junct. to D. M. & M. Con.....			1.75					
Jewell Junct. to Wall Lake Junct.....			73.68					
Eagle Grove to Hawarden.....			145.20					
Winona & St. Peter Railroad.....	448.48							
Winona to Watertown.....						288.50	84.48	
Mankato Junct. to Mankato.....						8.75		
Sleepy Eye to Redwood Falls.....						24.40		
Rochester to Zumbrota.....						24.48		
Eyota to Plainview.....						15.01		
Eyota to Chatfield.....						11.46		
Tracy to Dakota Line.....						46.40		
Dakota Central Railway.....	723.93							
Minn. State Line to Pierre.....							209.11	
James Valley Junct. to Oakes.....							117.87	14.28
Watertown to Gettysburg.....							146.25	
Watertown Junct. to Watertown.....							43.88	
Iroquois to Hawarden (State Line).....							125.49	
Centerville to Yankton.....							28.46	
Doland to Groton.....							38.84	
Total.....	1,573.66		384.85	16.06		414.34	744.13	14.28
Recapitulation.								
C. & N. W. R'y (chartered or consol.)....	2,676.72	586.28	778.27	930.49	381.55	.13		
Proprietary Lines.....	1,573.66		384.85	16.06		414.34	744.13	14.28
Total.....	4,250.38	586.28	1,163.12	946.55	381.55	414.47	744.13	14.28

	Total Miles.	In Michigan.
Total,	1,573.66	
Total miles operated by the company,	4,250.38	381.55

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of	29;	Aggregate length, feet,	2,543
Iron bridges, number of	7;	Aggregate length, feet,	730
Combination bridges, number of	3;	Aggregate length, feet,	494
Wooden trestles, number of	547;	Aggregate length, feet,	25,817
Total,	586;		29,584

*Draw Bridges in Michigan.*

How many on your line? - - - - - None.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Milwaukee & Northern R. R., at Menominee (3 crossings).  
 Milwaukee & Northern R. R., at Antonie.  
 Milwaukee & Northern R. R., at Wabik.  
 Minnesota, Sault Ste. Marie & Atlantic R. R., at Hermansville.  
 Minnesota, Sault Ste. Marie & Atlantic R. R., near Narenta.  
 Duluth, South Shore & Atlantic R. R., at Negaunee.  
 Duluth, South Shore & Atlantic R. R., near Lake Angeline.  
 Duluth, South Shore & Atlantic R. R., at Michigamme.  
 Duluth, South Shore & Atlantic R. R., at Diorite.  
 Duluth, South Shore & Atlantic R. R., at Dishno.  
 Duluth, South Shore & Atlantic R. R., near Republic.

What railroads cross your road either over or under your grade in this State, and where?

Over:

Milwaukee & Northern R. R., at Antonie.  
 Duluth, South Shore & Atlantic R. R., at Negaunee (2 crossings).  
 Minnesota, Sault Ste. Marie & Atlantic R. R., at Flat Rock.

Under:

Duluth, South Shore & Atlantic R. R., near Wabik.

At what crossings are interlocking and derailling switches in operation?

Union switch and signal interlocking switches at Duluth, South Shore & Atlantic crossing, one mile east of Michigamme, and at the Milwaukee & Northern crossing at Wabik.

Randolph interlocking switch at Duluth, South Shore & Atlantic Republic Branch crossing, two miles east of Republic.

What pattern or patterns have you adopted?

See answer to preceding question.

Number of crossings of highways at grade in this State,	141
Number of crossings of highways at grade in this State at which there are gates or flagmen,	7

Number of crossings at which there are electric or automatic signals,	None.
What pattern or patterns in use?	
Number of crossings of highways over or under railroad (over none; under 7),	7
Number of highway bridges 18 feet above track,	None.
Number of highway bridges less than 18 feet above track,	None.
Have safety guards been erected at over-head obstructions?	Yes.
Are your frogs and guard rails blocked as required by Act 174, Session Laws 1883?	Yes.
How are they treated?	
Oak block fitted to space and renewed as required.	

*Stations.*

Number of stations on whole line at which there are buildings and agents,	686
Same in Michigan at which there are buildings and agents,	37

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials,	16,758
Same in Michigan,	1,640

Classify your employees as per following list:

	Number.
Baggagemen,	290
Brakemen,	1,129
Conductors,	606
Engineers,	928
Firemen,	1,005
Laborers,	5,140
Shopmen,	3,195
Yardmen,	712
Others,	3,753

## . REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?	587.50
Give the number of miles required to complete fence on both sides of your track, in Michigan, and the counties in which needed:	
Iron County,	50.7
Menominee County,	33.5
Delta County,	20.
Marquette County,	56.6
Gogebic County,	12.8
Total miles required,	173.60



*Road Bed and Track.*

Number of track sections in Michigan, about, - - -	63
Average length of sections (miles) about, - - -	6
Average number of men in each section gang, about, - - -	4.8
Number of new ties put in whole line during the year, - - -	1,183,159
Number of new ties put in track in Michigan, - - -	56,610
Average number of new ties per mile of road, about, - - -	278

## New rails put in track:

Steel (tons 12,551,118) miles 115.18.	
Total miles of track with new rails, - - -	115.18

*Bridges and Culverts.*

Amount of trestle work replaced with earth during year (linear feet), - - -	None.
Timber culverts replaced during the year, - - -	None.
New bridges built during the year, - - -	None.

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - -	688	
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - -	96	
Number of locomotives of 10 to 20 tons weight, exclusive of tender, - - -	2	
Total, - - -	786	\$3,615,000
Number of passenger cars—12 wheel, including parlor and official cars, - - -	233	589,600
Number of passenger cars—8 wheel, including chair and official cars, - - -	122	296,400
Number of express and baggage cars, - - -	117	117,000
Number of box freight cars, - - -	14,588	4,376,400
Number of stock cars, - - -	1,861	558,300
Number of platform and coal cars, - - -	4,147	1,078,220
Number of ore cars, - - -	4,346	651,900
Number of conductors' way cars, - - -	451	270,600
Other cars as follows:		
Dining, - - -	9	
Milk, - - -	28	
Mail, - - -	26	
Combination, - - -	49	
Boarding (for men), - - -	18	
Dump, - - -	25	
Pile driving and wrecking, - - -	28	
Ditching, - - -	82	
	265	222,200
Total, - - -	26,130	\$8,160,620
Grand Total, - - -		\$11,775,620

Number of locomotives equipped with power brakes,	616
Number of passenger-train cars equipped with power brakes,	584
Number of freight cars equipped with power brakes,	347

What patterns of power brakes have you in use, and number of locomotives and cars with each?

Locomotives equipped with Westinghouse air brake,	540
Locomotives equipped with Westinghouse air brake and Eames steam brake	38
Locomotives equipped with American steam brake,	38
	616
Passenger cars equipped with Westinghouse automatic air brake,	584
Freight cars equipped with Westinghouse automatic air brake,	347

Are your freight cars being equipped with automatic couplers as required by Act. No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? The Blocker automatic car coupler.

How are your passenger cars heated? We are using the Baker heater and stoves.

#### MILEAGE, TRAFFIC, ETC.

##### *Train Mileage.*

Miles run by passenger trains during the year,	6,669,722
Miles run by freight trains during the year,	13,218,048
Total mileage of trains earning revenue,	19,887,770

##### *Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried,	51,996		
Number of local passengers carried,	11,845,387		
Total number of passengers carried,	11,897,383		

Total passenger mileage, or passengers carried one mile,	284,440,539
Average distance traveled by each passenger,	23.95
Average amount received from each passenger,	\$0 54
Average rate of fare per mile for through passengers,	02.41
Average rate of fare per mile for local passengers,	02.23
Average rate of fare per mile for all passengers,	02.24

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	313,961		
Number of tons of local freight carried,	11,566,216		
Total tons of freight carried,	11,880,177		
Total mileage of through freight,		130,810,745	
Total mileage of local freight,		1,686,848,085	
Total freight mileage, or tons carried one mile,		1,817,658,830	
Average ton haul for through freight,			417
Average ton haul for local freight,			146
Average ton haul for all freight,			153
Average amount received for each ton haul,			\$1 56
Average rate per ton per mile, received for through freight,			00.92
Average rate per ton per mile, received for local freight,			01.03
Average rate per ton per mile, received for all freight,			01.02

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	1,195
Flour,	1,061
Provisions (beef, pork, lard, etc.),	948
Animals,	1,224
Other agricultural products,	3,685
Lumber and forest products,	358,871
Coal,	69,558
Plaster, lime and cement,	699
Salt,	44
Petroleum,	717
Railroad iron, iron and steel rails,	96
Pig and bloom iron,	27,915
Other iron and castings,	906
Ores,	2,849,038
Stone, brick and sand,	1,094
Manufactures—articles shipped from point of production,	8,361
Merchandise and other articles not enumerated above,	16,723
Total forwarded,	3,342,135

*Tonnage of Articles Transported—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	1,362,700	11.47
Flour, - - - - -	148,263	1.25
Provisions (beef, pork, lard, etc.), - - -	155,806	1.31
Animals, - - - - -	510,559	4.30
Other agricultural products, - - - - -	402,166	3.39
Lumber and forest products, - - - - -	1,275,299	10.73
Coal, - - - - -	1,302,554	10.96
Plaster, lime and cement, - - - - -	131,070	1.10
Salt, - - - - -	56,753	.48
Petroleum, - - - - -	111,074	.95
Railroad iron, iron and steel rails, - - -	74,067	.62
Pig and bloom iron, - - - - -	189,316	1.59
Other iron and castings, - - - - -	145,045	1.22
Ores, - - - - -	3,726,126	31.36
Stone, brick and sand, - - - - -	467,077	3.93
Manufactures,—articles shipped from point of production, - - - - -	293,697	2.47
Merchandise and other articles not enumerated above, - - - - -	1,528,605	12.87
Total tons carried, - - - - -	11,880,177	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company, and United States Express Co. For terms and conditions as to rates, see statement attached. The Express Companies have no care of machinery or repairs of cars.

They do a miscellaneous business, restricted to lighter articles properly belonging to express business. The Express Companies deliver their freight into this company's cars.

Route.	Rate Per Diem on Limited Tonnage.—Whole Route.	Limit of Pounds to be Carried each Day, Whole Route, at Regular Per Diem Rate.	Tonnage for Week of Six Days.	Tonnage for Week of Seven Days.	Rate per 100 Pounds Carried Whole Length of Route, to be Paid on Excess of Tonnage.	Remarks.
<i>American Express Company.</i>						
Chicago to Council Bluffs.....	\$275 00	15,000	90,000	105,000	\$1 25 1 00	On mdse. On fruit, fish, oysters, and vegetables.
Chicago to Freeport.....	80 00	12,000	72,000	84,000	50	
Elgin to Lake Geneva.....	5 34	2,000	12,000	14,000	25	On mdse.
Chicago to Ishpeming.....	281 48	10,000	60,000	70,000	1 50 1 00	On fruit, fish, oysters, fresh meat and vegetables.
Kenosha to Rockford.....	5 07	1,000	6,000	7,000	35	On mdse.
Chicago to Winona.....	135 88	10,000	60,000	70,000	1 05 60	On fish, oysters, fruit, and vegetables.
W. & St. P. R. R. and branches, including Dakota Division.....	109 00	6,666	40,000	46,666	1 60 1 00	On mdse. On fish, fruit, vegetables oysters and fresh meat.
Clinton to Anamosa.....	6 25	1,000	6,000	7,000	80	
Stanwood to Tepton.....	2 00	500	3,000	3,500	25	
Maple River R. R. & branches.....	11 13	1,500	9,000	10,500	30	
Des. M. & Minn. R. R.....	10 00	2,000	12,000	14,000	35	
Northern Iowa Div.....	25 52	2,000	12,000	14,000	75	
Milwaukee & Galena Lines.....	80 00	3,000	18,000	21,000	75	
Iowa Southwestern Railway.....						\$50.00 per month.
Belle Plaine to Muchakinock.....		500	3,000	3,500	40	\$50.00 per month.
Sheboygan to Princeton.....						56 cents per cwt. on all freight.
Sycamore to Cortland.....						10½ cents per cwt. on all freights.
North Illinois Ry.....						50 cents per cwt. on all freights.
<i>United States Express Company.</i>						
Chicago to Milwaukee.....	66 66	17,000	102,000	119,000	40 30	On local business between Chicago & Milwaukee and intermediate stations. On business from and to points on M. L. S. & W. Ry.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

The entire length of road is afforded with telegraph facilities by the lines of the Western Union Telegraph Company, in which this company owns certain wires, or rights to their use.

## TRANSPORTATION COMPANIES.

*Sleeping, Drawing-Room and Palace Car Companies.*

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Sleeping cars are run on this company's lines in Michigan.

This company furnishes fuel and light, and keeps in order the exterior of the cars.

They are owned by the Wagner Palace Car Co. and all charges in addition to regular fare are made and collected by the owner.

On "extra" cars, (not regularly assigned to this line) this company has paid the Wagner Palace Car Co. of New York, N. Y., \$27.42 as mileage.

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid? None.

REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

KILLED.

January 19, J. H. Macdonald, Elmwood. Derailment; accidental.

January 19, W. F. Cochrane, Elmwood. Derailment; accidental.

January 19, H. A. Tuttle, Elmwood. Derailment; accidental.

January 28, S. H. Hull, Nadeau. Lying on track drunk; carelessness.

February 28, Daniel Breen, conductor, Memominee. Fell from car; want of caution.

March 23, John Ulmuck, Cascade Jct. Lying on track; carelessness.

May 25, Kenney Morrison, Negaunee. Lying on track drunk; carelessness.

June 11, William McCord, yard master, Escanaba. Fell from train; want of caution.

August 26, Mrs. Johanna Shannan, Negaunee. Crossing track; want of caution.

August 29, John O'Connel, switchman, Ishpening. Struck by cars; want of caution.

September 26, J. C. Wittenstrain, laborer, Cedar Siding. Walking on track; want of caution.

September 27, Thomas Higgins, brakeman, Maple Ridge. Fell between cars; want of caution.

October 7, John Clymo, brakeman, Republic. Walking on track; want of caution.

October 21, S. Anell, Golden. Jumped off moving train; carelessness.

October 27, John Oleson, laborer, Vulcan. Sitting on track; carelessness.

October 28, John Groop, switchman, Escanaba. Getting on foot board of engine; carelessness.

November 5, Patrick English, Quinnesec. Crossing track; want of caution.

November 22, unknown man, Apple Creek. Fell off train; carelessness.

December 1, unknown man, Birchwood. Threw himself in front of engine; carelessness.

## INJURED.

January 3, John O'Donnell, brakeman, Bagley. Coupling; want of caution.

January 19, H. R. Armstrong, conductor, Elmwood. Derailment; accidental.

January 19, E. P. Foster, Elmwood. Derailment; accidental.

January 19, Mrs. D. C. McClure, Elmwood. Derailment; accidental.

January 19, Mrs. M. M. Beaser and child, Elmwood. Derailment; accidental.

February 4, Charles Vassau, brakeman, Negaunee. Knocked off car by tank spout; want of caution.

February 22, Nick Mahle, brakeman, Stephenson. Coupling; want of caution.

February 22, M. W. Pillsbury, conductor, Powers. Coupling; want of caution.

March 11, Mike McMellen, Bagley. Lying on track drunk; carelessness.

March 22, Geo. McCain, brakeman, Stephenson. Coupling; want of caution.

May 4, Geo. Fellows, switchman, Vulcan Mine. Coupling; want of caution.

May 9, Jas. J. Ward, conductor, Ballow. Fell off end of car; want of caution.

May 10, John Flemming, switchman, Chapin Mine. Derailment; accidental.

May 15, Napoleon Barshaw, switchman, Memominee. Coupling; want of caution.

May 24, Chas. H. Marston, conductor, Goose Lake. In baggage car doorway, struck by car on sidetrack; want of caution.

June 6, Lewis Gustinson, laborer, Powers. Fell off end of car; want of caution.

June 11, John Johnson, car repairer, Escanaba. Repairing car which was struck by another; want of caution.

June 22, John Stromgist, engineer, Vulcan. Fell off ore car; want of caution.

July 19, John Carran, engineer, Watersmeet. Stepped off platform and fell; want of caution.

July 21, Daniel Kennelly, switchman, Escanaba. Fell on car; want of caution.

July 25, Ferdinand Meisner, Menominee. Jumped off moving train; carelessness.

July 26, F. Landston, laborer, Iron Mountain. Kneeling on stone wall, inflammation; want of caution.

July 26, E. Dierdam, Quintown. Jumping on train; carelessness.

August 13, Thos. Charnley brakeman, Goose Lake. Log fell from car crushing into caboose; accidental.

August 13, Matt. Fogarty, conductor, Goose Lake. Log fell from car crushing into caboose; accidental.

October 3, Jno. E. Rown, brakeman, Winthrop. Coupling; want of caution.

October 7, Henry Scherer, brakeman, Waucedah. Coupling; want of caution.

October 16, Jno. Sweeney, Switchman, L. S. Mine. Coupling; want of caution.

October 30, Ed. Ryan, brakeman, Iron Mountain. Coupling; want of caution.

December 7, Pat. Coughlin, switchman, Ishpeming. Coupling; want of caution.

### TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....					11	
Derailments.....	8			4	2	
Falling from trains.....		8			8	
Frogs.....		1				
Getting on and off trains.....						
Highway crossings.....			2			
Miscellaneous.....		4			6	
Overhead and side obstructions.....					2	
Trespassers on trains.....			2			2
Trespassers on tracks.....			4			1
Total.....	8	8	8	4	24	3

### SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year, - - - - -	19
Number of persons injured during the year, - - - - -	31
Number of casualties purely accidental, - - - - -	11
Number resulting from lack of caution, carelessness, or misconduct, - - - - -	39
Persons killed or injured while intoxicated, - - - - -	3
Trespassers and tramps killed or injured, - - - - -	9
Suicides, - - - - -	1

### CLASSIFICATION OF EMPLOYÉS.

#### KILLED OR INJURED IN MICHIGAN.

Employés.	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....	2	8	10
Conductors.....	1	5	6
Engineers.....		2	2
Firemen.....			
Laborers.....	2	2	4
Shopmen.....			
Yardmen.....	3	6	9
Not classified above.....		1	1
Total.....	8	24	32



STATE OF ILLINOIS, }  
COUNTY OF COOK, } ss.

Marvin Hughitt, President, and J. B. Redfield, Auditor, of the Chicago & Northwestern Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed,

MARVIN HUGHITT,  
J. B. REDFIELD.

Subscribed and sworn to before me this 21st day of February, A. D. 1890.

[L. S.] Signed,

J. F. CLEVELAND,

*Notary Public.*

ANNUAL REPORT  
OF THE  
MICHIGAN CENTRAL RAILROAD COMPANY,

*For the Year ending December 31, 1889.*

[Filed March 18, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*Chairman*, C. VANDERBILT, New York City, N. Y.  
*President*, H. B. LEDYARD, Detroit, Mich.  
*Vice President and Secretary*, E. D. WORCESTER, New York City, N. Y.  
*Auditor*, D. A. WATERMAN, Detroit, Mich.  
*Treasurer*, HENRY PRATT, New York City, N. Y.  
*General Manager*, H. B. LEDYARD, Detroit, Mich.  
*General Superintendent*, E. C. BROWN, Detroit, Mich.  
*Assistant General Superintendent*, ROBERT MILLER, Detroit, Mich.

*Division Superintendents:*

D. S. SOUTHERLAND, Detroit, Mich.  
W. A. VAUGHAN, Bay City, Mich.  
C. B. BUSH, Jackson, Mich.  
R. H. L'HOMMEDIEU, Chicago, Ills.  
J. B. MORFORD, St. Thomas, Ont.  
*Chief Engineer*, J. D. HAWKS, Detroit, Mich.  
*Superintendent of Telegraph*, E. E. TORREY, Detroit, Mich.  
*Cashier*, J. E. GRIFFITHS, Detroit, Mich.  
*General Passenger Agent*, O. W. RUGGLES, Chicago, Ills.  
*General Freight Agent*, A. MACKAY, Chicago, Ills.  
*General Counsel*, ASHLEY POND, Detroit, Mich.  
*General Attorney*, HENRY RUSSEL, Detroit, Mich.

DIRECTORS.

CORNELIUS VANDERBILT, New York City.  
WILLIAM K. VANDERBILT, New York City.  
HENRY B. LEDYARD, Detroit, Mich.  
EDWIN B. WORCESTER, New York City.  
SAMUEL F. BARGER, New York City.  
CHAUNCEY M. DEPEW, New York City.  
ASHLEY POND, Detroit, Mich.  
WILLIAM L. SCOTT, ERIE, PA.  
FREDERICK S. WINSTON, Chicago, Ills.

Terms expire May, 1890.

## STOCKHOLDERS, STOCK, AND GENERAL OFFICERS.

When chartered or articles of association filed,—March 28, 1846.

Number of Stockholders at date of last election, - - - 1,402

Number of Stockholders in Michigan at same date - - - 17

Amount of full paid stock held in Michigan at same date, - - - \$63,900 00

Date of annual meeting of Stockholders,—Thursday following first Wednesday in May.

Fiscal year of company ends,—December 31.

General offices of the company are located at—

New York City, Grand Central Depot.

Detroit, Mich., foot of Third Street.

Chicago, Ill., 183 to 189 Dearborn Street.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total income.		\$13,786,925 16
Total expenses, including taxes, - - -	\$9,895,158 32	
Net income, - - -		3,891,766 84
Interest or funded debt:		
Main line, - - -	\$660,000	
Leased line, - - -	420,000	
	1,080,000 00	
Rentals of leased lines, - - -	143,256 63	
Canada Southern proportion of net earnings, -	407,444 43	
		2,919,971 06
Balance applicable to dividends, - - -		\$971,795 78
Dividends declared (5 per cent), - - -	\$936,910 20	
Balance for the year, - - -		\$34,885 58
Balance (profit and loss) last year, - - -		7,097,534 70
*Items not included in above, as follows:		
Income from sundry securities etc, - - -		46,665 66
Paid premium on J. L. and S. bonds, etc., -	\$7,730 75	
*Interest on funded debt and rentals of leased		
lines as per memorandum attached, -	397,742 60	
Balance forward to next year, - - -	6,773,612 59	
	\$7,179,085 94	\$7,179,085 94

\*The management of some twenty years ago, entered and reported to the debit of income account, interest paid, instead that of accruing.

The present administration having regarded such action as incorrect, have therefore charged this amount to income account, and from January 1, 1890, will charge annually against the current income account, the interest and rentals actually accruing.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association	Not limited.
Par value of shares, - - - - -	\$100 00
No. of shares issued, - - - - -	187,382.04
Amount paid in on common, - - - - -	\$18,738,204 00

Total amount paid in, as per books of the company, - \$18,738,204 00

Paid in per mile of road owned by company,—miles, 270.07, - - - - - \$69,382 77

## ANALYSIS OF DEBT ACCOUNT.

## FUNDED DEBT.

Class, Character, and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount Outstanding.
<i>Michigan Central Railroad Bonds.</i>				
Consolidated first mortgage, May 1st, 1872	7 per ct.	May 1st, 1902	New York	\$8,000,000 00
Consolidated first mortgage, Nov. 1st, 1882	5 per ct.	May 1st, 1902	New York	2,000,000 00
Michigan Air Line Railroad 1st mortgage Jan. 1st, 1870	8 per ct.	Jan. 1st, 1890	New York	1,900,000 00
Grand River Valley Railroad, 1st general mortgage, Sept. 1st, 1879	6 per ct.	Sept. 1st, 1909	New York	500,000 00
Grand River Valley Railroad, 1st general mortgage, March 1st, 1886	6 per ct.	Sept. 1st, 1909	New York	1,000,000 00
Detroit and Bay City Railroad, 1st mortgage, March 1st, 1881	5 per ct.	March 1st, 1931	New York	3,578,000 00
Kalamazoo and South Haven Railroad, 1st mortgage, Nov. 1st, 1889	5 per ct.	Nov. 1st, 1989	New York	630,000 00
Total funded debt				\$17,606,000 00

## UNFUNDED DEBT.

For what Incurred.	Is the Same to be Funded, or How Liquidated.	Amount.
For construction		
For equipment		\$192,853 19
For real estate		
For renewals		
For miscellaneous		2,474,790 87
For current balances		
Total unfunded debt		\$2,667,583 56

## RECAPITULATION.

Total funded debt,	\$17,606,000 00
Total unfunded debt,	2,667,583 56
Total debt liabilities,	\$20,273,583 56
Amount of debt liabilities per mile of road (270.07 miles),	75,067 88
Total amount of stock and debt,	\$39,011,787 56
Stock and debt per mile of road (270.07 miles),	144,450 65

## GENERAL BALANCE SHEET.—Dr.

Construction account, {	Includes amounts expended on account of construction of leased lines, - - - -	\$41,710,092 09
Other investments, (specifying same):		
Land at Detroit, - - - -	\$267,783 95	
Sundry securities, etc., - - - -	569,086 25	
		836,870 20
Cash items:		
Cash, - - - - -	\$1,483,097 35	
Bills receivable, - - - - -	1,489 06	
Due from agents, - - - - -	441,067 38	
		1,925,653 79
Other assets:		
Materials and supplies, - - - -	\$622,470 12	
Debit balances from companies and individuals, - - - - -	690,288 38	
		1,312,758 50
Total, - - - - -		\$45,785,374 58

## GENERAL BALANCE SHEET.—Cr.

Capital stock, - - - - -	\$18,738,204 00
Funded debt, - - - - -	17,606,000 00
Unfunded debt:	
Interest unpaid, - - - - -	\$74,380 00
Dividends unpaid, - - - - -	1,536 50
Vouchers and accounts, - - - -	1,183,993 43
Other liabilities (list as follows):	
Pay rolls, - - - - -	450,434 34
Dividend No. 55, due Feb. 1, 1890, -	562,146 12
Accrued interest of 1889, due in 1890, -	395,067 60
	2,667,557 99
Profit and loss or income accounts, - - - - -	6,773,612 59
Total, - - - - -	\$45,785,374 58

## COST OF ROAD AND EQUIPMENT.

*Purchased by Present Company.*

When purchased,—September, 24, 1846.	
Original cost to present company, of road and equipment,	\$2,000,000 00
Amount expended since purchase, account of construction, {	
Amount expended since purchase, account of equipment, }	28,936,350 89
Total cost to date of report, - - - - -	\$30,936,350 89
Average cost per mile of road (not including sidings —270.07 miles), - - - - -	114,549 38
Proportion of cost in Michigan (221 miles), - - - - -	25,315,412 98

## Amounts expended, account, leased an proprietary lines:

Michigan Air Line Railroad, - - - - -	\$2,950,527 15
Grand River Valley Railroad, - - - - -	2,389,662 29
Jackson, Lansing & Saginaw Railroad, - - - - -	839,645 64
Kalamazoo & South Haven Railroad, - - - - -	745,535 24
Saginaw Bay & Northwestern Railroad, - - - - -	176,739 00
Detroit & Bay City Railroad, - - - - -	3,671,631 88
Total property account, - - - - -	<u>\$41,710,092 09</u>

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Land, - - - - -	\$4,300 00
-----------------	------------

*Leased or Proprietary Roads.*

Michigan Air Line Railroad, - - - - -	Lands, \$350 00
Grand River Valley Railroad, - - - - -	Lands, 100 00
Jackson, Lansing & Saginaw Railroad, - - - - -	Lands, 7,167 55
Detroit & Bay City Railroad, - - - - -	Lands, 36,510 01
Saginaw Bay & Northwestern Railroad, - - - - -	Lands, 190 00
	<u>\$48,617 56</u>

## BONDS.

Kalamazoo & South Haven Railroad for \$640,000.00 1st mortgage bonds issued for construction, taken up on maturity, Nov. 1, 1889, by bonds of this company of Nov. 1, 1939, which are secured by mortgage on the Kalamazoo & South Haven Railroad, - - - - -	630,000 00
Total charges to property account as above, - - - - -	<u>\$678,617 56</u>
Property sold and credited, - - - - -	None.
Net addition to property account, - - - - -	678,617 56

# ANALYSIS OF EARNINGS. PASSENGER EARNINGS.

Roads.	Local Fare.	Through Fare.	Total Passenger Fare.	Express and Baggage.	Mails.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
Main line and branches.....	\$1,440,672 72	\$424,009 52	\$1,865,583 24	\$228,062 35	\$114,231 86	\$2,302,866 45	\$1,718,779 86		\$7,704 66
<i>Leased or Proprietary Roads.</i>									
Michigan Air Line Railroad.....	50,293 63	39 15	50,332 78	1,282 70	9,609 84	70,225 32	66,529 18		609 80
Joliet & Northern Indiana Railroad.....	12,144 77	60 90	12,205 67	3,201 48	1,980 20	14,791 35	169,808 75		336 70
Grand River Valley Railroad.....	157,988 73	8,291 22	146,239 95	3,202 35	19,576 45	169,808 75	567,124 03		2,090 63
Jackson, Lansing & Saginaw Railroad.....	513,028 23	7,128 90	520,157 08	12,192 92	34,774 68	567,124 03	27,069 74		1,921 80
Kalamazoo & South Haven Railroad.....	24,790 70	42 65	24,833 35	9,702 59	3,227 80	27,069 74	266,654 07		1,700 50
Detroit & Bay City Railroad.....	290,384 84	8,207 35	298,742 23	9,702 59	18,209 04	306,654 07	151,569 62		1,761 02
Toledo, Canada Southern & Detroit Railroad.....	140,616 36	20,454 14	161,070 40	6,500 08	11,010 36	179,180 84	6,609 34		3,207 10
Canada Southern Ry. (in Canada).....	798,904 80	488,582 08	1,275,796 88	111,029 47	34,960 24	1,421,786 34	18,324 86		3,732 23
Michigan Midland and Canada Railway.....	3,464 48		5,464 48	101 34	1,043 32	6,609 34	729 63		450 23
Saginaw Bay & Northwestern Railroad.....	17,115 86		17,115 86		1,209 00	18,324 86			205 16
Canada Southern Bridge Company.....	636 35		636 35		108 06	729 63			189 35
Total passenger department earnings.....	\$3,372,125 61	\$984,985 76	\$4,357,091 37	\$398,384 08	\$249,516 07	\$4,945,241 52	\$2,968,329 68	\$1 30	\$3,177 23

## FREIGHT EARNINGS.

Roads.	Local Traffic.	Through Traffic.	Total Traffic.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
Main line and branches.....	\$1,890,908 19	\$1,531,358 81	\$3,362,267 00	\$3,362,267 00	\$2,615,767 05		\$11,836 05
<i>Leased or Proprietary Roads.</i>							
Michigan Air Line Railroad.....	75,575 35	8,619 18	84,194 53	84,194 53	79,764 10		781 11
Joliet & Northern Indiana Railroad.....	62,737 69	47,274 06	110,011 75	110,011 75	134,252 62		2,444 71
Grand River Valley Railroad.....	106,708 08	27,549 54	134,252 62	134,252 62	968,734 72		1,602 25
Jackson, Lansing & Saginaw Railroad.....	941,196 11	2,538 61	943,734 72	943,734 72	24,002 84		3,265 79
Kalamazoo & South Haven Railroad.....	23,520 67	481 67	24,002 34	24,002 34	501,221 20		607 65
Detroit & Bay City Railroad.....	402,750 82	98,470 38	501,221 20	501,221 20	463,198 63		3,310 14
Toledo, Canada Southern & Detroit Railroad.....	397,445 64	95,732 99	493,178 63	493,178 63	391,899 02		8,290 65
Canada Southern Railway (in Canada).....	1,315,502 96	1,660,835 44	2,976,338 40	2,976,338 40	3,204 86		7,854 96
Michigan Midland and Canada Railway.....	3,204 86		3,204 86	3,204 86	114,302 80		218 31
Saginaw Bay & Northwestern Railroad.....	114,302 80		114,302 80	114,302 80	243 85		1,279 84
Canada Southern Bridge Company.....	243 85		243 85	243 85			66 63
Total freight department earnings.....	\$5,284,092 02	\$3,472,870 66	\$8,756,962 70	\$8,756,962 70	\$4,828,392 56	\$1 47	\$5,613 82

Total transportation earnings,	-	-	\$13,682,204 22
Transportation earnings per mile of road,	\$8,790 54		
Transportation earnings per train mile,	1 40		
Miscellaneous receipts from operating account, other than for transportation, as follows:			
From other sources,	104,720 94		
Total,	\$104,720 94		

## MISCELLANEOUS EARNINGS.

	Total Miscellaneous.	Proportion for Michigan.
Main line and branches,	\$49,539 28	\$38,540 19
Michigan Air Line Railroad,	39 00	37 09
Joliet & Northern Indiana Railroad,	39,913 00	
Grand River Valley Rail- road,	988 56	988 56
Jackson, Lansing & Saginaw Railroad,	5,767 87	5,767 87
Detroit & Bay City Railroad	1,803 00	1,803 00
Toledo, Canada Southern & Detroit Railroad,	278 64	235 88
Canada Southern Bridge Company,	261 50	261 50
Canada Southern Railway (in Canada),	6,130 09	
Total earnings from operation of road,	-	13,786,925 16
Total earnings per mile of road,	8,857 82	
Total earnings per train mile	1 41	
Taxable earnings for Michigan:		
Michigan Air Line R. R.,	146,332 90	
Jackson, Lansing & Sagi- naw R. R.,	1,536,627 22	
Kalamazoo & South Haven R. R.	51,672 08	
Detroit & Bay City R. R.	769,678 27	
Toledo, Canada Southern & Detroit Ry.	543,734 66	
Canada Southern Bridge Company,	1,234 98	
Michigan Midland & Canada Ry.,	9,814 20	
Saginaw Bay & North- western Ry.,	132,627 66	
Total,	\$3,191,721 97	
Total taxable earnings per mile of road in Michigan,	4,255 40	
Income other than from earnings,	-	38,934 91
Total income from all sources,	-	\$13,825,860 07
Proportion of income for Michigan,	-	3,191,719 30



## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track,	\$945,756 50
Renewals of rails,	131,710 75
Renewals of ties,	196,881 68
Repairs of bridges, including culverts and cattle guards,	267,266 07
Repairs of fences, road crossings and signs,	165,417 00
Repairs of buildings,	209,100 35
Total,	\$1,916,132 35

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives,	\$651,177 37
Repairs of passenger cars,	302,828 25
Repairs of freight cars,	762,653 23
Repairs to ferry boats,	83,953 50
Total,	\$1,800,612 35

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives,	\$1,002,154 52
Water supply,	53,549 47
Oil and waste,	57,703 16
Locomotive service,	774,370 15
Passenger train service,	180,401 74
Passenger train supplies,	32,417 67
Mileage of passenger cars,	6,310 84
Freight train service,	410,406 25
Freight train supplies,	30,216 90
Mileage of freight cars,	447,828 74
Telegraph expenses (maintenance and operating),	225,246 37
Damage and loss of freight and baggage,	21,041 70
Damages to property and cattle,	19,223 66
Personal injuries,	79,132 16
Agents and station service,	1,174,081 74
Station supplies,	72,238 30
Detroit river crossing,	65,939 58
Total,	\$4,652,262 95

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company,	\$70,000 00
Salaries of clerks in general offices,	163,513 79
Law expenses,	45,790 53
Insurance,	8,265 12
Stationery and printing,	71,211 15
Outside agencies and advertising,	266,689 30
Contingencies,	94,052 69
Taxes,	307,622 35
Total,	\$1,027,144 93

## RECAPITULATION OF EXPENSES.

	Per cent of Expenses.	
Maintenance of way and buildings, - - -	19.36	\$1,916,132 35
International bridge tolls, - - -	.51	50,601 01
Maintenance of motive power and cars, - - -	18.20	1,800,612 35
Conducting transportation, - - -	47.02	4,652,262 95
Track rentals and terminals, - - -	4.53	448,404 73
General expenses, including taxes, - - -	10.38	1,027,144 93

Total operating expenses and taxes, - - - \$9,895,158 32

Operating expenses and taxes per mile of road, \$6,357 44

Operating expenses and taxes per train mile  
run, for trains earning revenue (9,754,666  
miles), - - - 1 01

Proportion of operating expenses and taxes for  
Michigan:

Main line, - - - 3,162,346 46

*Leased or Proprietary Roads.*

Michigan Air Line Railroad, - - -	\$216,691 15
Grand River Valley Railroad, - - -	245,119 99
Jackson, Lansing & Saginaw Railroad, - - -	1,254,176 42
Kalamazoo & South Haven Railroad, - - -	43,216 80
Detroit & Bay City Railroad, - - -	500,511 29
Toledo, Canada Southern & Detroit Ry., - - -	455,455 74
Canada Southern Bridge Company, - - -	6,585 08
Michigan Midland & Canada Ry., - - -	13,125 49
Saginaw Bay & Northwestern R. R., - - -	119,498 19

Total proportion of expenses for Michigan, - - - \$6,016,726 61

Percentage of expenses to earnings, 71.77

Net earnings per mile of road, - - - \$2,500 38

Net earnings per train mile, - - - 40

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Detroit, Mich., to Chicago, Ill., May, 1852.

## MAIN LINE.

Miles. 100ths. Miles. 100ths.

In Michigan:

From Detroit to State Line, - - - 221 00

In Indiana:

From Michigan State Line to Hammond (Ill. State  
Line), - - - 43 00

In Illinois:

From Hammond (Ill. State Line) to Kensington, - 6 07

Total length completed,	270 07
Length of double track on main line,	120 00
Total length of road belonging to this company,	270 07
Total length of road belonging to this company in Michigan,	221 00
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,	162 40
Aggregate length of tracks in Michigan belonging to this company, computed as single track,	383 40
Gauge of track, 4 feet 8½ inches,	

*Proprietary or Leased Roads Operated by this Company.*

Name, description, and length of each:	Total Miles. In Michigan.	
Chicago & Kensington,	14 00	
Michigan Air Line Railroad,	115 16	109 10
Joliet & Northern Indiana Railroad,	45 00	
Grand River Valley Railroad,	83 79	83 79
Jackson, Lansing & Saginaw Railroad,	295 10	295 10
Kalamazoo & South Haven Railroad,	39 50	39 50
Detroit & Bay City Railroad,	151 42	151 42
Toledo, Canada Southern & Detroit Railway,	55 87	47 27
Michigan Midland & Canada Railroad,	14 68	14 68
Canada Southern Bridge Company,	3 66	3 66
Saginaw Bay & Northwestern Railroad,	89 31	89 31
Canada Southern and branches in Canada,	378 91	
Total,	1,286 40	833 83
Total miles operated by the company,	1,556 47	1,054 83

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of, 205; aggregate length, feet,	14,615
Stone bridges, number of, 4; aggregate length, feet,	481
Iron bridges, number of, 35; aggregate length, feet,	4,486
Combination bridges, number of, 5; aggregate length, feet,	3,358
Wooden trestles, number of, 77; aggregate length, feet,	7,797
Total,	326; 30,737

*Draw Bridges in Michigan.*

How many on your line?	10
Where located, when built, and length of draw span:	
St. Charles, over Bad River, built in 1881, feet,	37½
Paines, over Tittabawassee River, built in 1886, feet,	108
South of West Bay City, over Scuawkonging Creek, built in 1884, feet,	34
South of West Bay City, over west channel Saginaw river, built in 1889 (middle ground), feet,	131
South of Kawkawlin, over Kawkawlin River, built in 1880, feet,	51

Bay City, over Saginaw River, built in 1884, feet,	188
East Saginaw, over Saginaw River, built in 1886, feet,	190
Grosse Isle, over Detroit River, built in 1884, feet,	340 1/2
South of Woodmere, over Rouge River, built in 1887, feet,	160
South of Rockwood, over Huron River, built in 1881, feet,	128
Character of structure:	
Iron, wood and stone piers.	
Material of which constructed:	
Iron, wood and stone.	
Height above water, and depth of water under bridge:	
From 15 to 30 feet.	
How swung, by engine or hand power?	
One by engine, balance by hand.	
Approaches, straight or curved:	
Straight.	
Do you require all trains to come to a full stop before crossing a draw, and how are they signalled?	
Yes. By bridge tender.	

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Lake Shore & Michigan Southern Railroad, at West Detroit, Albion, Kalamazoo, Jackson, Homer, Three Rivers, South End of Junction Yard, Detroit, Woodward Avenue, Detroit, and Eaton Rapids.

Wabash Railroad, at West Detroit and Delray.

Flint & Pere Marquette Railroad, at Wayne Junction, East Saginaw, Otter Lake, Bay City, North Saginaw and South Saginaw.

Detroit, Monroe & Toledo, at Detroit.

Grand Trunk Railway, at Detroit (Woodward Avenue).

Detroit, Grand Haven & Milwaukee Railroad, at Milwaukee Junction and Owosso.

Pontiac, Oxford & Port Austin Railroad, at Oxford.

Michigan Air Line Railroad, at Rochester and Jackson.

Chicago & Grand Trunk Railway, at Lapeer, Nichols, Charlotte, Lansing and Cassopolis.

Port Huron & Northwestern Railroad, at Vassar and near East Saginaw.

Saginaw, Tuscola & Huron Railroad, at Reese.

Grand Rapids & Indiana Railroad, at Kalamazoo and Wasepi.

Saginaw Bay & Northwestern Railroad, at Pinconning.

Chicago & West Michigan Railroad, at Grand Junction and Grand Rapids.

Fort Wayne & Jackson Railroad, at Jackson.

Chicago & Canada Southern Railroad, at Slocum Junction.

Detroit, Lansing & Northern Railroad, at Lansing and North Lansing.

Toledo, Ann Arbor & North Michigan Railroad, at Owosso Junction and East Saginaw.

Cincinnati, Jackson & Mackinaw Railroad, at Homer.

St. Louis, Sturgis & Battle Creek Railroad, at Colon.

Chicago, Kalamazoo & Saginaw Railroad, at Hastings.

Cincinnati, Saginaw & Mackinaw Railroad, at North Saginaw and West Bay City.

What railroads cross your road either over or under your grade in this State, and where?

**Over grade:**

Toledo, Ann Arbor &amp; North Michigan Railroad, at Ann Arbor.

Chicago &amp; West Michigan Railroad, at New Buffalo.

Cincinnati, Jackson &amp; Mackinaw Railroad, at 2 miles east of Augusta.

**Under grade:**

Cincinnati, Wabash &amp; Michigan Railroad, at Niles and 2 miles south of Niles.

Indiana &amp; Lake Michigan Railroad, at Galien.

**At what crossings are interlocking and derailing switches in operation?**

Wayne Junction, Albion, Nichols, Wasepi, Colon, Milwaukee Junction, East Saginaw, Lansing, South Saginaw and North Saginaw, Jackson, Hastings and Grand Rapids.

**What pattern or patterns have you adopted?**

Union Switch and Signal Co. Swissvale pattern.

Number of crossings of highways at grade in this State, 1,290

Number of crossings of highways at grade in this State at which there are gates or flagmen, 102

Number of crossings at which there are electric or automatic signals, 59

**What pattern or patterns in use?**

Railway Safety Gate Co.; Pneumatic Gate Co.; Penn. Steel Co. Magnetic.

Number of crossings of highways over or under railroad—  
(over 36; under 18.)

Number of highway bridges 18 feet above track, 27

Number of highway bridges less than 18 feet above track, 9

Have safety guards been erected at over-head obstructions, Yes

Are your frogs and guard rails blocked as required by Act 174, Session Laws 1883? Yes

**How are they treated?**

Wooden blocking spiked to ties.

*Stations.*

Number of stations on whole line, 420

Same in Michigan, 280

*Employees.*

Number persons regularly employed on all roads operated by company, including officials, 8,867

Same in Michigan, 5,910

**Classify your employés as per following list:**

	Number.
Baggagemen,	93
Brakemen,	532
Conductors,	280
Engineers,	468
Firemen,	538
Laborers,	2,075
Shopmen,	937
Yardmen,	678
Others,	3,266

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?	1,766
Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed:	
Crawford county,	12
Otsego county,	19
Cheboygan county,	64
Bay county,	16
Gladwin county,	34
Total miles required,	145

*Road Bed and Track.*

Number of track sections in Michigan,	245
Average length of sections (miles),	4.3
Average number of men in each section gang,	4
Number of new ties put in whole line during the year,	523,617
Number of new ties put in track in Michigan,	361,197
Average number of new ties per mile of road,	342
New rails put in track:	
Steel (tons 4355) miles, 34.69.	
Total miles of track laid with new rails,	34.69

*Bridges and Culverts.*

Amount of trestle work replaced with earth during the year, (linear feet),	517
Timber culverts replaced during the year	158
With iron pipe,—number,	47
With sewer pipe,—number,	11
With timber,—number,	97
With stone,—number,	3

New bridges built during the year,—number, 6

Location.	Kind.	Material.	Month Built.	Feet in Length.
½ mile east of Galien.....	Pile bridge.	Wood.	October, 1889.	73
West channel Saginaw River.....				
Middle ground, West Bay City.....	Howe Truss Draw.	Wood and iron.	June, 1889.	131
Middle ground, east & west approaches	Pile bridge.	Wood.	June, 1889.	445
Wolverine.....	Iron Girder.	Iron.	May, 1889.	43
4 miles south of Wolverine.....	Iron Girder.	Iron.	May, 1889.	43
Total.....				785

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - -	362	\$2,556,275 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - -	57	228,050 00
Total, - - -	419	\$2,784,325 00
Number of passenger cars—12 wheel, including official cars, - - -	8	71,000 00
Number of passenger cars—8 wheel, including official cars, - - -	201	783,900 00
Number of express and baggage cars, - - -	79	152,200 00
Number of box freight cars, - - -	7,401	2,220,300 00
Number of stock cars, - - -	1,361	374,275 00
Number of platform cars, - - -	3,483	783,675 00
Number of conductors' way cars, - - -	266	119,700 00
Other cars, - - -	150	109,975 00
	12,949	\$4,615,025 00
Total, - - -		\$7,399,350 00

Number of locomotives equipped with power brakes, - - - 112

Number of passenger-train cars equipped with power brakes, - - - 209

Number of freight cars equipped with power brakes,—None.

What patterns of power breaks have you in use, and number of locomotives and cars with each? Locomotives—61 "Westinghouse," 51 "American." Cars—209 "Westinghouse."

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? Ames, Aikman, Janney.

How are your passenger cars heated? Martin Anti Fire Car Heater.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year, - - -	3,808,281
Miles run by freight trains during the year, - - -	5,416,554
Miles run by mixed trains, - - -	529,831
Total mileage of trains earning revenue, - - -	9,754,666

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried, - - -	113,827	48,245,097	
Number of local passenger carried, - - -	3,044,546	139,401,051	
Total number of passengers carried, - - -	3,158,373	—————	

	Miles.	Rate. Dollars. Cents.
Total passenger mileage, or passengers carried one mile,	187,646,148	
Average distance traveled by each passenger,	59.41	
Average amount received from each passenger,		\$0 01.37
Average rate of fare per mile for through passengers,		01.98
Average rate of fare per mile for local passengers,		02.42
Average rate of fare per mile for all passengers,		02.31

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	1,427,679		
Number of tons of local freight carried,	4,872,269		
Total tons of freight carried,	6,299,948		
Total mileage of through freight,		620,958,780	
Total mileage of local freight,		582,161,439	
Total freight mileage, or tons carried one mile,		1,203,120,219	
Average ton haul for through freight,		435	
Average ton haul for local freight,		119	
Average ton haul for all freight,		191	
Average amount received for each ton haul,		\$1 93	
Average rate per ton per mile, received for through freight,			00.559
Average rate per ton per mile, received for local freight,			00.904
Average rate per ton per mile, received for all freight,			00.726

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	124,700
Flour,	85,811
Provision (beef, pork, lard, etc.),	15,795
Animals,	45,077
Other agricultural products,	123,240
Lumber and forest products,	1,634,235
Coal,	71,419
Plaster, lime and cement,	15,020
Salt,	181,581
Petroleum,	16,464
Railroad iron, iron and steel rails,	2,974
Pig and bloom iron,	24,367
Other iron and castings,	45,951
Ores,	8,927
Stone, brick and sand,	92,080
Manufactures,—articles shipped from point of production,	245,202
Merchandise and other articles not enumerated above,	233,526
Total forwarded,	2,966,369



*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	542,469	8.61
Flour, - - - - -	144,093	2.29
Provisions (beef, pork, lard, etc.), - - - - -	279,633	4.44
Animals, - - - - -	216,722	3.44
Other agricultural products, - - - - -	315,561	5.01
Lumber and forest products, - - - - -	1,929,280	30.62
Coal, - - - - -	771,518	12.25
Plaster, lime and cement, - - - - -	27,146	0.43
Salt, - - - - -	243,433	3.86
Petroleum, - - - - -	79,274	1.26
Railroad iron, iron and steel rails, - - - - -	26,907	0.43
Pig and bloom iron, - - - - -	98,713	1.57
Other iron and castings, - - - - -	115,297	1.83
Ores, - - - - -	13,465	0.21
Stone, brick and sand, - - - - -	213,551	3.39
Manufactures,—articles shipped from point of production, - - - - -	513,704	8.15
Merchandise and other articles not enumerated above, - - - - -	769,182	12.21
Total tons carried, - - - - -	6,299,948	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company do an express business over the lines of the Michigan Central Railroad Company, paying the following rates for transportation of their freight:

	Per Cwt.
Chicago to Buffalo, through freight, - - - - -	\$0 80
Chicago to Buffalo, New York produce, - - - - -	50
Chicago to Detroit, fruit, - - - - -	80
Buffalo to Lansing, Niles, Three Rivers, Hammond, Jackson, Cassopolis, Michigan City, Battle Creek, Kalamazoo, Charlotte, Grand Rapids, Wasepi, South Bend, Joliet and New Buffalo,—on business originating at New York and Boston, - - - - -	80
Mackinaw City to Detroit, venison, - - - - -	60
Indian River to Bay City, berries, - - - - -	40
	Per ton per mile
Local freight on main line Detroit to Chicago, - - - - -	\$0 07
Local freight on Air Line Division Jackson to South Bend, - - - - -	07
Local freight on Grand Rapids Division Rives Junction to Grand Rapids, - - - - -	07
Local freight on Saginaw Division Jackson to Mackinaw City, - - - - -	07
Local freight on South Haven Division Kalamazoo to South Haven, - - - - -	07

## Bay City Division,— Detroit to Bay City:

Produce,—First class freight rates.

Fish and fruit,—First class freight rates with 10 per cent added.

Merchandise,—1½ first class freight rates.

Messengers' fare \$6.50 per day excepting on the Saginaw branch, which is \$25.00 per month.

## Toledo Division,—Detroit to Toledo.

Merchandise, 1½ 1st class freight rates.

Special freight, 1st class freight rates with 10% added.

Messengers' fare, \$3.30 per day.

Canada Division,—Buffalo to Detroit and freight therefrom to Toledo Division.

	Per Cwt.
Buffalo to Toledo,	\$0 60
Toledo to Buffalo, produce,	44
Toledo to Buffalo, Eastern freight,	46.27
Toledo to Buffalo, local,	46.27
Detroit to Buffalo, local,	41.25
Detroit to Buffalo, produce,	30.25
Buffalo to St. Thomas,	24
Detroit to St. Thomas,	24
Local freights in Canada, 1st, 1½ 1st class freight rates.	
Special,—1st class freight rates with 10 per cent added.	
Niagara Division, Niagara to Chippewa,	14
Clifton to Niagara,	15
Midland Division, St. Clair to Lenox,	10
Buffalo to Chicago, New York freight consigned to American Express Company,	40
Empty packages returned on all divisions at one-half regular rates.	

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Michigan Central Railroad Company,	1,082.80
Michigan Central Railroad and Western Union Telegraph Company,	279.00
Western Union Telegraph Company,	5,213.00
Canada Southern Railway Company,	925.30
Great Northwestern Telegraph Company,	352.60
	<hr/> 7,852.70

*Transportation Companies.*

## SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report? Pullman Palace Car Company, Chicago, Ill., \$123.93.

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

American Refrigerating Transit Co., St. Louis, Mo.	\$24 00
Anglo American Refrigerating Car Co., Chicago, Illinois	16,302 49
Arms Palace Horse Car Co., Chicago, Illinois	256 62
Armour Cudahy Refrigerating Line, South Omaha, Nebraska	94 00
Armour Refrigerating Line, Chicago, Illinois	2,388 20
Atlanta Stone Coal & Lime, Atlanta, Ga.	2.82
Austell Refrigerating Car Co., Atlanta, Ga.	2.01
Barrett & Barrett, Chicago, Illinois	34 89
S. E. Barrett, Manufacturing Co., Chicago, Illinois	2 79
Blue Line, Rochester, N. Y.	56,609 39
Boston Live Stock Line, Boston, Mass.	7,547 40
Bousfield & Co., Bay City, Mich.	310 78
Burton Stock Car Co., Boston, Mass.	69 60
Canada Southern Line, Rochester, N. Y.	5,621 49
Chicago Refrigerating Car Co., LaFayette, Indiana	35 83
Chicago & Ohio Coal & Car Co., Chicago, Illinois	862 32
Chicago Steel Works, Chicago, Illinois	2 77
Cincinnati, Hamilton & Dayton, Cincinnati, Ohio	351 18
Columbus & Hocking Coal & Iron, Columbus, Ohio	3,550 89
Cupples Wooden Ware Co., Grand Rapids, Mich.	16 11
Crocker Chair Co., Chicago, Illinois	8 67
Detroit Iron Furnace Co., Detroit, Mich.	4 59
J. Dold & Son, D. Beef Line, Kansas City, Mo.	19 33
Eagle Consolidated Tank Line, Cleveland, Ohio	68 05
Empire Line, Philadelphia, Pa.	3 15
E. C. Walker, Detroit, Mich.	3 72
Empire Oil Works, Reno, Pa.	3 90
J. W. Elsworth & Co., Chicago, Illinois	71
Delaware Oil Co., Lima, Ohio	12 73
R. R. Fitchburg, Boston, Mass.	132 11
Frazer Lubricating Co., Chicago, Illinois	15 11
G. H. Hull & Co., Louisville, Ky.	9 26
Grand Rapids & Indiana, Grand Rapids, Mich.	88 94
Great Eastern Line, Montreal Quebec	12 57
G. H. Hammond & Co., Ref. Line, Chicago, Illinois	1,279 09
Hutchins Ref. Car Co., Chicago, Illinois	1,207 01
Indianapolis, D. & Western, Indianapolis, Indiana	20 13
Jenkins Live Poultry Car Co., Chicago, Illinois	6 90
Kansas City D. Beef Line, Kansas City, Mo.	29 58
Silas Kilburn & Co., Grand Rapids, Mich. C. & W. M. Ry.	3 32
Lima Oil Co., Lima, Ohio	681 74
Louisville New A. & C. Ry. Chicago, Illinois	9 06
Michigan Salt Line, East Saginaw, Mich.	4,848 70
Midland Line, Buffalo, N. Y.	14 09
Ed. Morris Ref. Line, Chicago, Illinois	103 05

N. Morris & Co., Ref. Line, Chicago, Illinois.....	\$98 31
Menosha Wooden Ware Co., Chicago, Illinois.....	4 27
Mutual Oil Co., Oil City, Pa.....	5 64
National Despatch Line, St. Albans, Vt.....	533 45
National Linseed Oil Co., Chicago, Illinois.....	295 29
New York, Lake Erie & West, Jersey City, N. J.....	246 85
Nickel Plate Line, Rochester, N. Y.....	3 22
Ohio & Western Coal and Iron Co., Columbus, Ohio.....	45 57
Ohio Coal Exchange, Columbus, Ohio.....	30 97
D. W. Parker, Kalamazoo, Mich.....	12 20
Peerless Tank Line, Cleveland, Ohio.....	25 77
Paragon Refining Co., Toledo, Ohio.....	32 24
Post, Martin & Co., New York, N. Y.....	4 10
Red Line, Buffalo, N. Y.....	96 11
Rend, (W. P.) Chicago, Illinois.....	27 97
Rend, (W. P.) & Co., Chicago, Illinois.....	46 85
Southern Iron Car Line, Atlanta, Ga.....	23 67
Sioux City D. Beef Line, Sioux City, Iowa.....	6 47
Scofield, Shurmer & Teagle, Cleveland, Ohio.....	6 70
Sheboygan Chair Co., Chicago, Illinois.....	6 50
Somers Coal Co., Columbus, Ohio.....	278 45
Street's Stable Car Line, Chicago, Illinois.....	168 37
Swift Refr. Transp. Co., Chicago, Illinois.....	5,446 98
St. Charles Car Co., St. Louis, Mo.....	18 95
St. Louis Refr. Car Co., St. Louis, Mo.....	50 60
Standard Oil Co., Cleveland, Ohio.....	2 58
Standard Oil Co., (U. T. L.) New York, N. Y.....	1,035 52
Sun Oil Line Co., Toledo, Ohio.....	41 61
Western Michigan Equip. Co., Grand Rapids, Michigan, C. & W. M. Ry.....	177 84
Washington Refining Co., Washington, Pa.....	35
White Line, Buffalo, N. Y.....	4 58
Wheeling & Lake Erie, Toledo, Ohio.....	103 57
Total, - - - - -	\$111,552 64

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

January 16, Burger Godfrey, West Bay City. Jacking up car; carelessness.

February 2, Charles Dease, Bay City. Run over; trespasser.

March 6, unknown man, Junction Yards. Run over; trespasser.

March 29, L. Wesendorf, West Bay City. Jumped from way Car; carelessness.

April 29, Samuel Yagust, Junction Yards. Struck by train; trespasser.

May 4, unknown man, Vanderbilt. Lying on track; trespasser.

May 6, Gordon Kake, Lapeer. Walked off train; carelessness.

May 8, Mrs. Alex. Hadlock, Kalamazoo. Struck by engine 204; Highway collision.

May 8, Mrs. George Smiley, Kalamazoo. Struck by engine 204; highway collision.

May 8, Mrs. Middleton, Kalamazoo. Struck by engine 204; highway collision.

May 8, Mrs. M. E. Wattles, Kalamazoo. Struck by engine 204; highway collision.

May 8, Miss Gertie Tillitson, Kalamazoo. Struck by engine 204; highway collision.

May 20, Milburn Hoffman, Detroit. Run over; trespasser.

May 29, Charles Taylor, Galien. Stealing ride and fell from train; trespasser.

June 17, James Moklan, Zilwaukee. Fell from train; accidental.

June 27, F. W. Holt, Dentons. Walking on track; trespasser.

July 2, J. S. Rarepeski, West Bay City. Went to sleep on clinker pit; carelessness.

July 2, Samuel Harvey, Gladwin. Run over; lack of caution.

August 3, Scotty Anderson, Brooks. Jumping on train; trespasser.

August 10, W. D. Manchester, Vassar. Standing on track; lack of caution.

August 26, Mrs. Linn, Ypsilanti. Jumped off train; lack of caution.

August 28, unknown woman, Marshall. Struck by train; trespasser.

August 29, Elizabeth Rourke, Galien. Walking on track; trespasser.

October 1, Mrs. Hill, Zilwaukee. Struck by train; trespasser.

October 2, Delbert Kinsler, Detroit. Crossing between cars; lack of caution.

October 8, unknown man, Dearborn. Struck by train No. 15; trespasser.

October 7, C. H. Wetherbee, Dailey. Fell from train; accidental.

October 13, Peter Quin, Lansing. Boom breaking on steam derrick; accidental.

October 13, John Tontilevish, Lansing. Boom breaking on steam derrick; accidental.

October 13, George Ruby, Lansing. Boom breaking on steam derrick; accidental.

October 13, N. H. Palmer, Detroit. Collision.

October 13, Charles Pierce, Detroit. Collision.

October 15, Martin Kramer, Detroit. Run over; lack of caution.

October 24, Augusta Petrowsky, Detroit. Catching onto cars; carelessness.

November 2, Joseph Koskaski, Cheney. Hand car jumping track; accidental.

November 3, unknown man, Dowagiac. Run over; trespasser.

November 6, John Johnson, Bay City. Run over; lack of caution.

November 6, unknown man, Detroit. Run over; trespasser.

November 6, John Soski, Vassar. Dirt falling on him; accidental.

November 7, W. H. Marentette, Reese. Coupling cars; carelessness.

November 23, Duncan D. Burdick, East Saginaw. Run over; suicide.

December 11, unknown man, Grayling. Struck by train; trespasser.

December 13, unknown man, Beaver Lake. Run over by train; trespasser.

December 17, Mr. VanDusen, Ann Arbor. Struck by engine; carelessness.

December 22, Edward Starkey, Niles. Run over by engine; trespasser.  
 December 23, Eugene Lamb, Vanderbilt. Run over; accidental.  
 December 25, Herbert Cranson, Dexter. Struck by train; carelessness.  
 December 25, William Doyle, Detroit. Struck by engine; trespasser.  
 December 30, Coley Durkee, Galesburg. Struck by engine; company not responsible.

## INJURED.

January 4, W. R. Bingham, Detroit. Coupling cars; carelessness.  
 January 5, A. F. Minturn, Detroit. Coupling cars; carelessness.  
 January 11, Elmer Chisholm, Battle Creek. Coupling cars; carelessness.  
 January 19, Elmer Rayhood, Jackson Junction. Coupling cars; carelessness.  
 January 26, Adolph Bemoig, Vassar. Engine taking water; carelessness.  
 January 30, August Verboska, Detroit. Walking on track; trespasser.  
 January 31, A. E. Benner, Bay City. Coupling cars; carelessness.  
 February 1, Amos Poggie, Detroit. Driving across track; carelessness.  
 February 1, Patrick Nestor, Junction Yards. Loading ice; carelessness.  
 February 2, F. Williams, Bay City. Coupling cars; carelessness.  
 February 7, Mrs. Chas. Colf, Bennington. Walking on track; trespasser.  
 February 20, Chas. Grant, Owosso. Coupling cars; carelessness.  
 February 25, Mrs. Albert Basom, Ypsilanti. Jumping from train; carelessness.  
 February 25, Frank Rivers, Bay City. Getting off engine; carelessness.  
 February 26, C. F. Chapman, Detroit. Struck by bridge; carelessness.  
 February 27, James O'Connor, Eden. Coupling cars; carelessness.  
 February 27, George Tree, Albion. Jumping from train; carelessness.  
 February 28, Jacob Lients, Detroit. Pushed off train; carelessness.  
 March 1, Michael Collins, Niles. Fell off train; carelessness.  
 March 4, George Carl, Chesaning. Walking on track; trespasser.  
 March 6, Joseph Rumney, Junction Yards. Coupling cars; carelessness.  
 March 30, Cyrus McGregor, Bay City. Riding across crossing on hose cart.  
 March 30, L. W. Tobias, Bay City. Riding across crossing on hose cart.  
 April 19, Chas. Carter, Dunham. Jumping off engine; carelessness.  
 April 24, Thos. Stewart, Battle Creek. Coupling cars; carelessness.  
 May 2, S Swinton, Frederic. Riding on steps of train; carelessness.  
 May 2, J Coombs, Vanderbilt. Hand car jumping track; accidental.  
 May 8, Mrs. S. A. Gibson, Kalamazoo. Struck by engine No. 204; highway collision.  
 May 8, Mrs. J. S. Barnes, Kalamazoo. Struck by engine No. 204; highway collision.  
 May 19, Edward Waterson, Pinconning. Run over; intoxicated.  
 May 23, Mrs. John Nicholles and Daughter, Bay City. Walking around train; carelessness.  
 May 24. — — Murphy, Jackson Junction. Struck by train; trespasser.  
 May 26, Louis Begeman, Ann Arbor. Struck by train; trespasser.  
 June 8, — — Hall, Wayne. Jumped off train; carelessness.  
 June 11, Unknown man, Saginaw. Struck by engine; trespasser.  
 June 14, A. B. Canfield, Detroit. Coupling cars; carelessness.

- June 22, Asa B. Wilson, Jackson. Fell from train; accidental.  
June 25, Howard Howles, Battle Creek. Walking on track; trespasser.  
June 28, L. Garver, Lansing. Coupling cars; carelessness.  
July 4, Mr. Simons, Ypsilanti. Struck by train; trespasser.  
July 9, J. Dart, W. Detroit. Coupling cars; carelessness.  
July 12, A. K. Bridge, Saginaw. Coupling cars; carelessness.  
July 18, F. F. Drake, Jackson. Jumped off train; carelessness.  
July 20, F. Dwelley, Dailey. Struck by lever of engine; accidental.  
July 22, Mr. Walbridge, Rochester. Fell off train; accidental.  
July 24, A. H. Flynn, Bay City. Coupling cars; carelessness.  
July 24, B. Taylor, Niles. Passing over top of train; accidental.  
July 25, J. Prindeville, Bay City. Coupling cars; carelessness.  
July 25, Frank Langdon, Jackson. Coupling cars; carelessness.  
July 27, Edward Aplin, Bay City. Coupling cars; carelessness.  
August 2, D. Cavanaugh, Millington. Eccentric strap breaking; accidental.  
August 13, unknown man, Inkster. Struck by train; trespasser.  
August 16, Frank Rogers, Jackson Junction. Coupling cars; carelessness.  
August 20, James Harwood, W. Bay City. Coupling cars; carelessness.  
August 27, D. S. Pond, West Branch. Coupling cars; carelessness.  
August 28, Thomas McHugh, Detroit. Coupling cars; carelessness.  
August 29, J. German, Wayne Junction. Coupling cars; carelessness.  
August 31, E. D. Braner, Detroit. Coupling cars; carelessness.  
September 4, McKelvey (boy), Chelsea. Jumping train; carelessness.  
September 8, Wm. Garber (boy), Lansing. Jumping train; carelessness.  
September 9, Will Varney, Wayne. Coupling cars; carelessness.  
September 12, unknown man, Lansing. Fell off train, drunk; carelessness.  
September 12, Chas. Converse, Mason. Jumping train; carelessness.  
September 13, Paulo Marell, Vienna. Run over; carelessness.  
September 27, M. G. Beckley, Linwood. Jumping train; carelessness.  
September 28, C. J. Arnold, Monroe. Coupling cars; carelessness.  
October 8, Unknown boy, Columbiaville. Knocked down by train; carelessness.  
October 13, W. Fuller, Three Rivers. Coupling cars; carelessness.  
October 20, Walter Warren, Detroit. Coupling cars; carelessness.  
October 20, A. Renkel, Detroit. Coupling cars; carelessness.  
October 28, Edward Boyd, Detroit. Run over; carelessness.  
November 2, John Brown, Cheney. Hand car jumping track; accidental.  
November 4, Jacob Gould, Bay City. Coupling cars; carelessness.  
November 5, Luke Gorman, Detroit. Coupling cars; carelessness.  
November 6, Thomas Boyle, Vassar. Jumping off train; carelessness.  
November 11, Joseph Corse, Beaver Lake. Coupling cars; carelessness.  
November 11, Wm. Aplin, Bay City. Jumping off cars; carelessness.  
November 13, Chas. Kruger, Junction Yards. Coupling cars; carelessness.  
November 15, Joseph Savage, Bay City. Coupling cars; carelessness.  
November 26, W. E. Reid, Detroit. Struck by train; carelessness; trespasser.  
November 26, Fred Smith, Detroit. Coupling cars; carelessness.

December 7, Fred Fie, Detroit. Struck by train; trespasser.  
 December 8, Patrick Digney, Jackson. Jumping train; carelessness.  
 December 14, John Prindeville, Bay City. Coupling cars; carelessness.  
 December 15, Chris. Hofschneider, Detroit. Crossing between cars;  
 December 18, H. H. Myers, Chesaning. Coupling cars; carelessness.  
 carelessness.  
 December 23, George Emmons, Bay City. Coupling cars; carelessness.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....		2				
Coupling cars.....		1			35	
Derailements.....						1
Falling from trains.....		4		4	2	
Frogs.....						
Getting on and off trains.....	1	1	1	1	4	8
Highway crossings.....			5	1		7
Miscellaneous.....	1	10			10	3
Overhead obstructions.....						
Trespassers on trains.....			2			1
Trespassers on tracks.....			21			11
Total.....	2	18	29	6	51	31

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	49
Number of persons injured during the year,	88
Number of casualties purely accidental,	15
Number resulting from lack of caution, carelessness, or misconduct,	88
Persons killed or injured while intoxicated,	2
Trespassers and tramps killed or injured,	30
Suicides,	1

## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....	1		1
Brakemen.....	6	19	25
Conductors.....	1	1	2
Engineers.....	2	2	4
Firemen.....	1	2	3
Laborers.....	4	5	9
Shopmen.....	3	1	4
Yardmen.....	1	25	26
Not classified above.....	30	32	62
Total.....	49	87	136



STATE OF MICHIGAN, }  
COUNTY OF WAYNE, } ss.

H. B. Ledyard president, and D. A. Waterman auditor of the Michigan Central Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this Company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said Company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

H. B. LEDYARD, President.

D. A. WATERMAN, Auditor.

Subscribed and sworn to before me this 15th day of March, A. D. 1890.

[L. S.]

GEO. L. NADOLLECT, Notary Public.

ANNUAL REPORT  
OF THE  
CANADA SOUTHERN BRIDGE COMPANY,

*For the Year Ending December 31, 1889.*

[Filed March 18, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JAMES TILLINGHAST, New York.  
*Secretary*, CHARLES F. COX, New York.  
*Treasurer*, CHARLES F. COX, New York.  
*Transfer Agent*, LANDRETH H. KING, New York.

DIRECTORS.

CORNELIUS VANDERBILT, New York, N. Y.  
WILLIAM K. VANDERBILT, New York, N. Y.  
JAMES TILLINGHAST, Buffalo, N. Y.  
SAMUEL F. BARGER, New York, N. Y.  
CHARLES F. COX, New York, N. Y.  
EDWIN D. WORCESTER, New York, N. Y.  
EDWARD A. WICKS, New York, N. Y.  
CHAUNCEY M. DEPEW, New York, N. Y.  
HENRY B. LEDYARD, Detroit, Mich.

Terms expire June, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—Consolidation, Aug. 20, 1873.

Number of Stockholders at date of last election, - - - - - 13

Number of Stockholders in Michigan at same date, - - - - - None.

Amount of full paid stock held in Michigan at same date, - - - - - None.

Date of annual meeting of Stockholders,—First Thursday after first Wednesday in June.

Fiscal year of company ends,—Dec. 31.

General offices of the company are located at Detroit, Mich.

## REMARKS.

The stock is controlled by the Canada Southern Railway Company, and the road, bridge, etc., are operated by the Michigan Central Railroad Company as a part of the Canada Southern system of roads, under an agreement for joint operation made December 12, 1882, between the Michigan Central and Canada Southern Companies.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,		\$1,500,000 00
Par value of shares,	\$100 00	
Average price received per share,	100 00	
Number of shares issued,	4,500	
Amount paid in,	\$450,000 00	
Total amount paid in, as per books of the company,		450,000 00
Paid in per mile of road owned by company.—Miles,	3.66	\$122,951 00

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	When Due.	Interest.		Amount.
		Rate.	Payable.	
First mortgage coupon bonds, dated Feb. 1, 1874..	Feb. 1, 1904..	7%	Feb. and Aug.	\$1,000,000
Total funded debt.....				\$1,000,000

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For Construction.....		
For Equipment.....		
For Real Estate.....		
For Renewals.....		
For Miscellaneous.....	Interest on bonds.....	\$1,060,000 00
For Current Balances.....		88,368 89
Total Unfunded Debt.....		\$1,148,368 89

## RECAPITULATION.

Total funded debt,	\$1,000,000 00
Total unfunded debt	1,118,368 89
Total debt liabilities,	\$2,118,368 89
Amount of debt liabilities per mile of road (3.66 miles),	\$578,789 00
Total amount of stock and debt,	\$2,568,368 89
Stock and debt per mile of road (3.66 miles),	701,740 00

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year? \$70,000.00.

Was it paid for the last year? No.

If interest is in default state the years and amounts as follows: Coupons due 1875 to 1889, inclusive, at \$70,000.00 per annum.

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction	\$1,780,977 05
Average cost per mile of road, not including sidings (3.66 miles),	486,606 00
Proportion of cost of construction for Michigan,	1,780,977 05

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

September, 1873.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan,	3.66	
Total length completed,		3.66
Total length of road belonging to this company,		3.66
Total length of road belonging to this company, in Michigan,	3 66	
Aggregate length of sidings, spurs, and other tracks not above enumerated,		9 06
Same in Michigan,	9 06	
Aggregate length of tracks belonging to this company, computed as single track,		12 72
Same in Michigan,	12 72	
Gauge of track, 4 feet 8½ inches.		

STATE OF NEW YORK, }  
COUNTY OF NEW YORK, } ss.

Charles F. Cox, Secretary and Treasurer of the Canada Southern Bridge Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

[L. s. of R. R.] Signed, C. F. COX, *Secretary and Treasurer.*

Subscribed and sworn to before me this 7th day of March, A. D. 1890.

[L. s.]

D. W. PARDEE,

*Notary Public, Kings Co., cert. filed in N. Y. Co.*

ANNUAL REPORT  
OF THE  
DETROIT & BAY CITY RAILROAD COMPANY.

*For the Year ending December 31, 1889.*

[Filed March 18, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, CORNELIUS VANDERBILT, New York City, N. Y.  
*Vice President*, HENRY B. LEDYARD, Detroit, Mich.  
*Secretary and Treasurer*, EDWIN D. WORCESTER, New York City, N. Y.

DIRECTORS.

CORNELIUS VANDERBILT, New York City, N. Y.  
WILLIAM K. VANDERBILT, New York City, N. Y.  
HENRY B. LEDYARD, Detroit, Mich.  
CHAUNCEY M. DEPEW, New York City, N. Y.  
SAMUEL F. BARGER, New York City, N. Y.

Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed, - May 21, 1871.  
Number of Stockholders at date of last election, - - - - - 7  
Number of Stockholders in Michigan at same date, - - - - - 4  
Amount of full paid stock held in Michigan at same date, - 400 shares.  
Date of annual meeting of Stockholders, - First Thursday after first Wednesday in May.  
Fiscal year of company ends, - December 31.  
General offices of the company are located at Detroit, Mich., and New York City.

REMARKS.

Under an agreement dated March 10, 1881, the Detroit & Bay City Railroad Company transferred the possession and control of its railroad and property to the Michigan Central Railroad Company. The latter company agreed to operate the same during its corporate existence. Under the terms of this agreement, the Michigan Central Railroad Company is authorized and agrees to issue its bonds to the amount of \$4,000,000.00, and both companies have joined in the execution of a mortgage upon all the Detroit & Bay City Railroad Company's property to secure the payment of said bonds.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$2,000,000 00
Par value of shares, -	\$100
Average price received per share, -	100
No. of shares issued, -	20,000
Amount paid in on common, -	\$2,000,000 00
Total amount paid in, as per books of the company, -	2,000,000 00
Paid in per mile of road owned by Company, (miles 146.32) -	\$13,668 67

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

The Michigan Central Railroad Company has issued its bonds to the amount of \$4,000,000.00 secured by a first mortgage on the property of the Detroit & Bay City Railroad Company.

Unfunded debt, - - - - - None.

## RECAPITULATION.

Total amount of stock and debt, - - - - -	\$2,000,000 00
Stock and debt per mile of road (146.32 miles), - - - -	13,668 67

## COST OF ROAD AND EQUIPMENT.

Included in Michigan Central Railroad Company's report.

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
Detroit and Bay City, July 31, 1873.

## MAIN LINE.

	Miles, 100ths.	Miles, 100ths.
Length completed in Michigan, - - - - -	109 00	
Total length completed, - - - - -	109 00	

## BRANCHES.

Saginaw Branch from Denmark Junction to East Saginaw, - - - - -	16 75
Caro Branch from Vassar to Caro, - - - - -	12 75
Detroit Belt Line, - - - - -	4 39
Bay City Belt Line, - - - - -	3 43
Total length of branches owned by company, -	37 32

	Miles. 100ths.	Miles. 100ths.
Total length of branches owned by company in Michigan,	37 32	
Total length of road belonging to this company,		146 32
Total length of road belonging to this company in Michigan,	146 32	
Leased—Bay City Street Railway,	5 10	
Aggregate length of sidings, spurs, and other tracks not above enumerated,		42 22
Same in Michigan,	42 22	
Aggregate length of tracks belonging to this company, computed as single track,		188 54
Same in Michigan,	188 54	
Gauge of track, 4 feet, 8½ inches.		

STATE OF NEW YORK, }  
CITY AND COUNTY OF NEW YORK, } ss.

Cornelius Vanderbilt, President, and Edwin D. Worcester, Secretary of the Detroit & Bay City Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, C. VANDERBILT, *President*,  
E. D. WORCESTER, *Secretary*.

Subscribed and sworn to before me this 5th day of March, A. D. 1890.

[L. S.] D. W. PARDEE,  
*Notary Public, Kings Co., cert. filed in New York Co.*



ANNUAL REPORT  
OF THE  
GRAND RIVER VALLEY RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed March 18, 1890.]

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OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICE.

*President*, AMOS ROOT, Jackson, Mich.

*Secretary and Treasurer*, E. W. BARBER, Jackson, Mich.

DIRECTORS.

AMOS ROOT, Jackson, Mich.

EDWARD W. BARKER, Jackson, Mich.

W. H. WITHINGTON, Jackson, Mich.

AUSTIN BLAIR, Jackson, Mich.

EDWARD S. LACEY, Charlotte, Mich.

HOMER G. BARBER, Vermontville, Mich.

NATHAN BARLOW, Hastings, Mich.

Terms expire October, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—May 4, 1846.

Number of stockholders at date of last election,	42
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Number of stockholders in Michigan at same date,	26
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Amount of full paid stock held in Michigan at same date,	\$325,250 00
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Date of annual meeting of stockholders,—First Monday in October.

Fiscal year of company ends December 31.

General offices of the company are located at Jackson, Michigan.

REMARKS.

This road is operated under a perpetual lease by the Michigan Central Railroad Company, the lessee having assumed all obligations and having entire control of the road.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$1,000,000 00
Par value of shares, - - - - -	\$50 00
Average price received per share, - - - - -	50 00
No. of shares issued, - - - - -	9,284 00
Amount paid in on common, - - - - -	\$491,200 00
Total amount paid in, as per books of the company, - - - - -	491,200 00
Paid in per mile of road owned by company (83.79 Miles), - - - - -	\$8,862 27

## ANYLSIS OF DEBT ACCOUNT.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
*First mortgage.....	6%	Sept. 1, 1909.....	New York....	\$500,000
First mortgage.....	6%	Sept. 1, 1909.....	New York....	1,000,000
Total funded debt.....				\$1,500,000

\*This is not in fact a debt of this company, but represents bonds of the M. C. R. R. Co. which that company by its agreement with this company, is obligated to pay, but the bonds are secured by a mortgage on the property of this company.

Unfunded debt, - - - - - None.

## RECAPITULATION.

Total funded debt, - - - - -	\$1,500,000 00
Total debt liabilities, - - - - -	\$1,500,000 00
Amount of debt liabilities per mile of road (83.79 miles), - - - - -	17,900 00
Total amount of stock and debt, - - - - -	\$1,991,200 00
Stock and debt per mile of road, - - - - -	23,762 .27

*Interest on the Funded Debt.*

What is the amount of same due each year, - - - - - \$90,000 00  
Was it paid for the last year? It was.

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment, - - - - -	\$2,867,053 00
Average cost of construction per mile of road (not including sidings—83.79 miles), - - - - -	34,229 17
*Proportion of cost for Michigan, - - - - -	2,867,053 00

\*\$1,500,000 of this amount is included in report of Michigan Central Company, as amount expended on account of leased lines.

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
Jackson to Grand Rapids.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan, - - - - -	83 79	
Total length completed, - - - - -		83 79
Total length of road belonging to this company, - - - - -		83 79
Total length of road belonging to this company in Michigan, - - - - -	83 79	
Aggregate length of sidings, spurs, and other tracks not above enumerated, - - - - -		15 56
Same in Michigan, - - - - -	15 56	
Aggregate length of tracks belonging to this company computed as single track, - - - - -		99 35
Same in Michigan, - - - - -	99 35	
Gauge of track, 4 feet 8½ inches.		

STATE OF MICHIGAN, { ss.  
COUNTY OF JACKSON, }

Amos Root, President, and E. W. Barber, Secretary, of the Grand River Valley Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1890, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

AMOS ROOT, *President*,  
E. W. BARBER, *Secretary*.

Subscribed and sworn to before me this 6th day of February, A. D. 1890.

J. M. ROOT,  
*Notary Public.*

ANNUAL REPORT  
OF THE  
JACKSON, LANSING & SAGINAW RAILROAD COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed March 18, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, HENRY A. HAYDEN, Jackson, Mich.  
*Secretary*, ORLANDO M. BARNES, Lansing, Mich.  
*Treasurer*, WM. D. THOMPSON, Jackson, Mich.  
*Transfer Agent*, HENRY PRATT, New York City.

DIRECTORS.

CORNELIUS VANDERBILT, New York City.  
JAMES F. JOY, Detroit, Mich.  
HENRY B. LEDYARD, Detroit, Mich.  
HENRY A. HAYDEN, Jackson, Mich.  
WM. D. THOMPSON, Jackson, Mich.  
PETER B. LOOMIS, Jackson, Mich.  
ORLANDO M. BARNES, Lansing, Mich.

Terms expire second Tuesday in January, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—Feb. 23, 1864.

Number of stockholders at date of last election,	33
--	----

Number of stockholders in Michigan at same date,	21
--	----

Amount of full paid stock held in Michigan at same date,	\$1,806,600 00
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Date of annual meeting of stockholders—Second Tuesday in January.

Fiscal year of company ends,—Calendar year.

General offices of this company are located at Lansing, Mich.

REMARKS.

The Michigan Central Railroad Company operate the company's road under an agreement which went into operation September 1, 1871.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,		\$2,500,000 00
Par value of shares,	100 00	
Average price received per share,	100 00	
No. of shares issued,	20,000 00	
Amount paid in on common,	\$2,000,000 00	
Total amount paid in, as per books of the company,		2,000,000 00
Paid in per mile of road owned by company, (295.10 miles),	\$6,777 36	

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
Consolidated mortgage bonds.....	8%	Sept. 1, 1891.....	New York.....	\$1,475,000
Bonds of May 1, 1881.....	6%	Sept. 1, 1891.....	New York.....	944,000
Total funded debt.....				\$2,419,000

## UNFUNDED DEBT.

Unfunded debt, - - - - - None.

## RECAPITULATION.

Total funded debt,	\$2,419,000 00
Total debt liabilities,	\$2,419,000 00
Amount of debt liabilities per mile of road (295.10 miles),	8,197 22
Total amount of stock and debt,	\$4,419,000 00
Stock and debt per mile of road	14,974 58

*Interest on the Funded Debt.*

What is the amount of same due each year? The interest is 8% on the \$1,475,000 and 6% on the \$944,000. Make the amount of interest due each year \$174,640 00.

Was it paid for the last year? It was.

## COST OF ROAD AND EQUIPMENT.

*Total cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction,	\$8,154,659 02
Average cost of construction per mile of road (not including sidings—295.10 miles),	27,633 54
Proportion of cost of construction for Michigan,	8,154,659 56

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
Jackson and Mackinaw, December 31, 1882.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan,	295	10
Total length completed,		295 10
Total length of road belonging to this company,		295 10
Total length of road belonging to this company in Michigan,	295	10
Aggregate length of sidings, spurs, and other tracks not above enumerated,		190 11
Same in Michigan,	190	11
Aggregate length of tracks belonging to this company, computed as single track,		485 21
Same in Michigan,	485	21
Gauge of track, 4 feet 8½ inches.		

STATE OF MICHIGAN, }  
COUNTY OF JACKSON, } ss.

H. A. Hayden, President, and O. M. Barnes, Secretary, of the Jackson, Lansing & Saginaw Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1890, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

H. A. HAYDEN, *President*,  
O. M. BARNES, *Secretary*.

Subscribed and sworn to before me this 4th day of February, A. D. 1890.

W. C. LEWIS,  
*Notary Public.*

ANNUAL REPORT  
OF THE  
KALAMAZOO & SOUTH HAVEN RAILROAD COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed March 18, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, ASHLEY POND, Detroit, Mich.

*Secretary and Treasurer*, D. A. WATERMAN, Detroit, Mich.

DIRECTORS.

C. VANDERBILT, New York City, N. Y.

ASHLEY POND, Detroit, Mich.

H. B. LEDYARD, Detroit, Mich.

HENRY RUSSEL, Detroit, Mich.

D. A. WATERMAN, Detroit, Mich.

JAMES CLEMENTS, Ann Arbor, Mich.

F. S. WINSTON, Chicago, Ill.

Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed, -April 15th, 1869.

Number of stockholders at date of last election,	202
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Number of stockholders in Michigan at same date,	124
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Amount of full paid stock held in Michigan at same date,	\$325,400
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Date of annual meeting of stockholders,—Second Wednesday in March.

Fiscal year of company ends,—December 31.

General offices of the company are located at Detroit, Mich.

REMARKS.

Leased to the Michigan Central Railroad Company, July 1, 1870, that company agreeing to complete, operate, pay the interest on bonds, pay taxes, etc., the same as if actual owners.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$500,000 00
Par value of shares, -	\$100 00
Average price received per share, -	100 00
Number of shares issued, -	325,400 00
Amount paid in on common, -	\$325,400 00

Total amount paid in as per books of the company, - \$325,400 00

Paid in per mile of road owned by company,  
(39.50 miles), - \$8,237 97

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
Second mortgage bonds, Nov. 1, 1870.....	8%	November 1, 1890.....	New York.....	\$70,000 00
Total funded debt.....				\$70,000 00

## UNFUNDED DEBT.

Unfunded debt, - - - - - None.

## RECAPITULATION.

Total funded debt, - - - - -	\$70,000 00
Total debt liabilities, - - - - -	\$70,000 00
Amount of debt liabilities per mile of road (39.50 miles),	1,772 15
Total amount of stock and debt, - - - - -	395,400 00
Stock and debt per mile of road, - - - - -	10,010 13

*Interest on Funded Debt.*

What is the amount of same due each year, - - - \$5,600 00  
Was it paid for the last year? - - - Yes.

## COST OF ROAD AND EQUIPMENT.

*Total cost for construction and equipment of road, and branches built by company.*

Total expended for construction, - - - - -	\$395,400 00
Average cost of construction per mile of road (not including sidings) 39.50 miles, - - - - -	10,010 13
Proportion of cost of construction for Michigan, - - - - -	\$395,400 00



## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
January 2, 1871, Kalamazoo to South Haven.

## MAIN LINE.

Length completed in Michigan	- - -	39.50	
Total length completed,	- - -	-	39.50
Total length of road belonging to this company,	- - -	-	39.50
Total length of road belonging to this company in Michigan,	- - -	39.50	
Aggregate length of sidings, spurs, and other tracks not above enumerated,	- - -	-	4.17
Same in Michigan,	- - -	4.17	
Aggregate length of tracks belonging this company, com- puted as single track,	- - -	-	43.67
Same in Michigan,	- - -	43.67	

Gauge of track, 4 feet 8½ inches.

STATE OF MICHIGAN, }  
County of Wayne, } ss.

Ashley Pond, President, and D. A. Waterman, Secretary, of the Kalamazoo & South Haven Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, 1889, to the best of their knowledge and belief.

Signed,

[ L. S. OF R. R. ]

ASHLEY POND, President.  
D. A. WATERMAN, Secretary.

Subscribed and sworn to before me this 15th day of March, A. D. 1890.  
GEO. L. NADOLLECT, Notary Public.

ANNUAL REPORT  
OF THE  
MICHIGAN AIR LINE RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed March 18, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, H. B. LEDYARD, Detroit, Mich.

*Secretary and Treasurer*, D. A. WATERMAN, Detroit, Mich.

DIRECTORS.

C. VANDERBILT, New York City, N. Y.

E. D. WORCESTER, New York City, N. Y.

H. B. LEDYARD, Detroit, Mich.

ASHLEY POND, Detroit, Mich.

HENRY RUSSEL, Detroit, Mich.

J. W. FRENCH, Three Rivers, Mich.

D. A. WATERMAN, Detroit, Mich.

Elected October 16, 1889.

Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—August 25, 1868, and October 11, 1870.

\* Number of stockholders at date of last election.

\* Number of stockholders in Michigan at same date.

\* Amount of full paid stock held in Michigan at same date.

Date of annual meeting of stockholders,—Third Wednesday in October.

Fiscal year of company ends, December 31.

General offices of the company are located at Detroit, Mich.

REMARKS.

This property is under perpetual lease to the Michigan Central Railroad Company, and has been so leased since its construction.

\*The Michigan Central now holds a majority of the stock, and control of the property, however the books were received in so imperfect a condition, the present management is unable to furnish all the information required by this form.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$4,000,000 00
Par value shares,	\$50 00
Number of shares issued,	7,855 $\frac{1}{4}$
Amount paid in on common,	Unknown.
Paid in per mile of road owned by company,	Unknown.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
Mortgage bonds, Oct. 10, 1870.....	8%	Nov. 1, 1890.....	New York.....	\$200,000 00
Total funded debt.....				\$200,000 00

## UNFUNDED DEBT.

Unfunded Debt,	None.
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## INTEREST ON THE FUNDED DEBT.

What is the amount due each year,	\$16,000 00
Was it paid for the last year? Yes.	

## COST OF ROAD AND EQUIPMENT.

Cost of road and equipment,	Unknown.
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## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
Jackson to Niles, January, 1871.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan,	109 10	
Length completed in Indiana,	6 06	
Total length completed,		115 16
Total length of road belonging to this company,		115 16
Total length of road belonging this company in Michigan,	109 10	
Aggregate length of sidings, spurs, and other tracks not above enumerated,		17 28
Same in Michigan,	15 70	
Aggregate length of tracks belonging to this company, computed as a single track,		132 44
Same in Michigan,	124 80	
Gauge of track, 4 feet, 8 $\frac{1}{2}$ inches.		

STATE OF MICHIGAN, }  
COUNTY OF WAYNE. } ss.

H. B. Ledyard, President, and D. A. Waterman, Secretary, of the Michigan Air Line Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1890, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

H. B. LEDYARD, *President.*

D. A. WATERMAN, *Secretary.*

Subscribed and sworn to before me this 15th day of March, A. D. 1890.

GEO. L. NADOLLECT,

*Notary Public, Wayne County, Michigan.*

ANNUAL REPORT  
OF THE  
MICHIGAN MIDLAND & CANADA RAILROAD COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed March 18, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JAMES TILLINGHAST, New York.  
*Secretary and Treasurer*, CHARLES F. COX, New York.  
*Transfer Agent*, LANDRETH H. KING, New York.

DIRECTORS.

CORNELIUS VANDERBILT, New York, N. Y.  
WILLIAM K. VANDERBILT, New York, N. Y.  
JAMES TILLINGHAST, Buffalo, N. Y.  
SAMUEL F. BARGER, New York, N. Y.  
CHARLES F. COX, New York, N. Y.  
EDWIN D. WORCESTER, New York, N. Y.  
EDWARD A. WICKES, New York, N. Y.  
CHAUNCEY M. DEPEW, New York, N. Y.  
CHARLES C. CLARKE, New York, N. Y.  
Terms expire June, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—dated September 17, 1872.  
Number of stockholders at date of last election, - - - - - 29  
Number of stockholders in Michigan at same date, - - - - - 3  
Amount of full paid stock held in Michigan at same date, - - - 222 shares.  
Date of annual meeting of stockholders,—First Thursday after first Wednesday in June.  
Fiscal year of company ends,—December 31.  
General offices of the company are located at Detroit, Michigan.

## REMARKS.

The stock is controlled by the Canada Southern Railway Company, and the road is operated by the Michigan Central Railroad Company as a part of the Canada Southern system of roads, under an agreement for joint operation made December 12, 1882, between the Michigan Central and Canada Southern Companies.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,		\$400,000 00
Par value of shares,	\$100 00	
Average price received per share,	100 00	
Number of shares issued,	3,000	
Amount paid in,	\$300,000 00	
Total amount paid in as per books of the company,		300,000 00
Paid in per mile of road owned by company, miles,	14.68	20,435 96

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage coupon bonds, dated July 1, 1873, and scrip.....	7%	July 1, 1900, interest July and January..	New York.....	\$523,635 00
Total funded debt.....				\$523,635 00

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For construction.....		
For equipment.....		
For real estate.....		
For renewals.....		
For miscellaneous.....	Interest on bonds.....	\$349,535 00
For current balances.....		42,066 53
Total unfunded debt.....		\$391,401 53

## RECAPITULATION.

Total funded debt,	\$323,635 00
Total unfunded debt,	391,401 53
Total debt liabilities,	<u>\$715,036 53</u>
Amount of debt liabilities per mile of road (14.68 miles),	48,708 21
Total amount of stock and debt,	<u>\$1,015,036 53</u>
Stock and debt per mile of road (14.68 miles),	69,144 17

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year,	\$22,610 00
Was it paid for the last year? No.	
If interest is in default state the years and amounts as follows:	
1873, \$4,025; 1874, \$9,765; 1875, \$20,300; 1876, \$21,490; 1877-8, \$22,540 each; 1879, \$22,575; 1880-9, \$22,610 each.	

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction,	\$586,342 02
Average cost of construction per mile of road (not including sidings—14.68 miles),	39,941 56
Proportion of cost of construction for Michigan.	586,342 02

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
St. Clair to Ridgeway, Michigan, Dec. 4, 1874.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan,	14 68	
Total length completed,		14 68
Total length of road belonging to this company,		14 68
Total length of road belonging to this company in Michigan,	14 68	
Aggregate length of sidings, spurs, and other tracks not above enumerated,		81
Same in Michigan,	81	
Aggregate length of tracks belonging to this company, computed as single track,		15 49
Same in Michigan,	15 49	
Gauge of track in Michigan, 4 feet 8½ inches.		

STATE OF NEW YORK, }  
COUNTY OF NEW YORK, } ss.

Charles F. Cox, Secretary and Treasurer, of the Michigan Midland and Canada Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

[L. S. OF R. R.] Signed, C. F. COX, *Secretary and Treasurer.*

Subscribed and sworn to before me this 7th day of March, A. D. 1890.

Signed, D. W. PARDEE,  
*Notary Public, Kings Co., cert. filed in New York Co.*



ANNUAL REPORT  
OF THE  
SAGINAW BAY & NORTHWESTERN RAILROAD COMPANY,  
*For the Year Ending December 31, 1889.*  
[Filed March 18, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, ASHLEY POND, Detroit, Mich.  
*Secretary, Treasurer and Transfer Agent*, D. A. WATERMAN, Detroit, Mich.

DIRECTORS.

H. B. LEDYARD, Detroit, Mich.  
ASHLEY POND, Detroit, Mich.  
D. A. WATERMAN, Detroit, Mich.  
HENRY RUSSEL, Detroit, Mich.  
W. R. VAUGHAN, Bay City Mich.  
Elected January 6, 1885--No meeting of stockholders since.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—November 27, 1884.  
Number of stockholders at date of last election, - - - - - 8  
Number of stockholders in Michigan at same date, - - - - - 7  
Amount of full paid stock held in Michigan at same date, - - - - - \$1,200  
Date of annual meeting of stockholders,—First Thursday after first Wednesday in May.  
Fiscal year of company ends December 31.  
General offices of the company are located at Detroit, Mich., and Bay City, Mich.

REMARKS.

The stock is controlled and the road operated by the Michigan Central Railroad Company.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$300,000 00
Par value of shares, - - - - -	\$100 00
Average price received per share, - - - - -	100 00
No. of shares issued, - - - - -	2,000
Amount paid in on common, - - - - -	\$200,000 00

Total amount paid in as per books of the company, - - - 200,000 00

Paid in per mile of road owned by company  
(89.31 miles), - - - - - \$2,239 39

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt, - - - - - None.

## UNFUNDED DEBT.

Unfunded debt, - - - - - None.

## RECAPITULATION.

Total amount of stock and debt,	\$200,000 00
Stock and debt per mile of road (89.3 miles), - - - - -	2,239 39

## COST OF ROAD AND EQUIPMENT.

*Total cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction as per books of the company,	\$225,526 15
Average cost of construction per mile of road (not including sidings- 89.31 miles), - - - - -	2,525 20
Proportion of cost of construction for Michigan, - - - - -	225,526 15

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
May, 1879.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan, - - - - -	28.72	
Total length completed, - - - - -		28.72

## BRANCHES

Sundry branches from main line to forest terminals,	60.59	
Total length of branches owned by company,		60.59
Total length of branches owned by company in Michigan,	60.59	
Total length of road belonging to this company,		89.31
Total length of road belonging to this company in Michigan,	89.31	
Aggregate length of sidings, spurs, and other tracks not above enumerated,		2.59
Same in Michigan,	2.59	
Aggregate length of tracks belonging to this company, computed as single track,		91.90
Same in Michigan,	91.90	
Gauge of track, 4 feet 8½ inches.		

STATE OF MICHIGAN, }  
COUNTY OF WAYNE, } ss.

Ashley Pond, President, and D. A. Waterman, Secretary, of the Saginaw Bay & Northwestern Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, ASHLEY POND, President.  
D. A. WATERMAN, Secretary.

Subscribed and sworn to before me this 15th day of March, A. D. 1890.

[L. S.] Signed, GEO. L. NADOLLECT,  
Notary Public.

ANNUAL REPORT  
OF THE  
TOLEDO, CANADA SOUTHERN & DETROIT RAILWAY.  
COMPANY,

*For the Year ending March 31, 1889.*

[Filed March 18, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JAMES TILLINGHAST, New York.  
*Secretary and Treasurer*, CHARLES F. COX, New York.  
*Transfer Agent*. LANDRETH H. KING, New York.

DIRECTORS.

CORNELIUS VANDERBILT, New York City.  
WILLIAM K. VANDERBILT, New York City.  
JAMES TILLINGHAST, Buffalo, N. Y.  
SAMUEL F. BARGER, New York City.  
CHARLES F. COX, New York City.  
EDWIN D. WORCESTER, New York City.  
EDWARD A. WICKES, New York City.  
CHAUNCEY M. DEPEW, New York City.  
ALLYN COX, New York City.

Terms expire June, 1890.

STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

When chartered or articles of association filed,—Consolidation (July 19, 1872) of the  
Detroit and State Line R. R. Co. of Michigan, and the Junction Ry. Co. of Ohio.

Number of Stockholders at date of last election, . . . . . 14

Number of Stockholders in Michigan at same date, . . . . . None.

Amount of full paid stock held in Michigan at same date, . . . . . None.

Date of annual meeting of Stockholders,—first Thursday after first Wednesday in June.

Fiscal year of company ends,—December 31.

General offices of the company are located at Detroit, Michigan.

## REMARKS.

The stock is controlled by the Canada Southern Railway Company, and the road is operated by the Michigan Central Railroad Company as a part of the Canada Southern system of roads, under an agreement for joint operation, made December 12, 1882, between the Michigan Central and Canada Southern Companies.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$2,000,000 00
Par value of shares, -	\$100 00
Average price received per share, -	100 00
No. of shares issued, -	15,476 $\frac{2}{3}$
Amount paid in on common, -	\$1,547,662 50

Total amount paid in, as per books of the company, - \$1,547,662 50

Paid in per mile of road owned by company,— miles, 55.87, \$27,701 13

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount Outstanding.
First mortgage gold bonds coupon dated August 1, 1872.....	7%	January 1, 1908, Interest Jan. & July	New York...	\$1,500,000 00
First mortgage scrip.....				11,787 50
Total funded debt.....				\$1,511,787 50

## UNFUNDED DEBT.

For what Incurred.	Is the Same to be Funded, or How Liquidated.	Amount.
For construction.....		
For equipment.....		
For real estate.....		
For renewals.....		
For miscellaneous.....	Interest on bonds	\$1,782,780 00
For current balances.....		23,785 91
Total unfunded debt.....		\$1,756,565 91

## RECAPITULATION.

Total funded debt,	\$1,511,737 50
Total unfunded debt,	1,756,565 91
Total debt liabilities,	\$3,268,303 41
Amount of debt liabilities per mile of road (55.87 miles),	58,498 36
Total amount of stock and debt,	\$4,815,965 91
Stock and debt per mile of road (55.87 miles),	86,199 49

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year?	\$105,000 00
Was it paid for the last year? No.	
If the interest is in default state the years and amounts as follows:	
1873, \$52,780.00; 1874 to 1889, inclusive, \$105,000.00 per annum.	

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction,	\$3,115,069 99
Average cost of construction per mile of road (not including sidings—55.87 miles),	55,755 68
Proportion of cost of construction for Michigan,	2,635,571 14

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
Springwells, Mich. to Toledo, Ohio, Sept. 1, 1873.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan,	47 27	
Length completed in Ohio,	8 60	
Total length completed,		55 87
Total length of road belonging to this company,		55 87
Total length of road belonging to this company in Michigan,	47 27	
Aggregate length of sidings, spurs, and other tracks not above enumerated,		42 08
Same in Michigan,	28 09	
Aggregate length of tracks belonging to this company, computed as single track,		97 95
Same in Michigan,	75 36	
Gauge of track, 4 feet 8½ inches,		

STATE OF NEW YORK, }  
COUNTY OF NEW YORK, } ss.

Charles F. Cox, Secretary and Treasurer of the Toledo, Canada Southern & Detroit Railroad Company being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

[L. S. OF R. R.] Signed, C. F. COX, *Secretary and Treasurer.*

Subscribed and sworn to before me this 7th day of March, A. D. 1890.

D. W. PARDEE,  
*Notary Public, Kings Co., cert. filed in New York Co.*

ANNUAL REPORT  
OF THE  
MANISTIQUE RAILWAY COMPANY.

*For the Year Ending Dececeember 31, 1889.*

[Filed March 20, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, M. S. SMITH, Detroit, Mich.  
*Vice President*, LEWIS A. HALL, Bay Mills, Mich.  
*Secretary and Treasurer*, J. C. McCaul, Detroit, Mich.  
*Auditor*, G. H. STALKER, Detroit, Mich.  
*General Superintendent*, THOS. OLIVER, Seney, Mich.

DIRECTORS.

R. A. ALGER, Detroit, Mich.  
M. S. SMITH, Detroit, Mich.  
A. J. Fox, Detroit, Mich.  
J. C. McCaul, Detroit, Mich.  
LEWIS A. HALL, Bay Mills, Mich.  
R. K. HAWLEY, Cleveland, Ohio.

Terms expire Dec. 31, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed, -Sept. 18, 1886, amended articles Oct. 21, 1889.

Number of stockholders at date of last election, - - - - -

Number of stockholders in Michigan at same date, - - - - -

Amount of full paid stock held in Michigan at same date, - - - - -

Date of annual meeting of stockholders,--

Fiscal year of company ends Dec. 31.

General offices of the company are located at Detroit, Mich.



## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -	- - - - -	\$44,685 99
Total expenses, including taxes, - - - - -	\$24,397 82	
Net income, - - - - -	- - - - -	\$20,288 17
Interest on unfunded debt, - - - - -	\$2,215 89	
Balance applicable to dividends, - - - - -	- - - - -	18,072 28
Balance for the year, - - - - -	- - - - -	\$18,072 28
Balance (profit and loss) last year, - - - - -	- - - - -	31,152 04
Balance forward to next year, - - - - -	\$49,224 32	
	\$49,224 32	\$49,224 32

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$500,000 00
Par value of shares, - - - - - \$100 00	
Number of shares issued, - - - - - 1,500	
Amount paid in on common, - - - - -	\$150,000 00
Total amount paid in, as per books of the company, -	150,000 00
Paid in per mile of road owned by company,—miles, 40.75, - - - - -	\$3,680 98

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt, - - - - -	None.
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## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For Construction... ..	To be paid... ..	\$68,553 01
For Equipment... ..	.....	.....
For Real Estate... ..	.....	.....
For Renewals... ..	.....	.....
For Miscellaneous... ..	.....	.....
For Current Balances... ..	.....	.....
Total Unfunded Debt... ..	.....	\$68,553 01

## RECAPITULATION.

Total unfunded debt - - - - -	\$68,553 01
Total debt liabilities, - - - - -	\$68,553 01

Amount of debt liabilities per mile of road (40.75 miles),	\$1,682 28
Total amount of stock and debt,	\$218,553 01
Stock and debt per mile of road (40.75 miles),	5,363 26

## GENERAL BALANCE SHEET.—DR.

Construction account,	\$220,098 10	
Equipment account,	40,983 85	
		\$261,081 95
Cash items:		
Cash,	\$6,542 00	
		6,542 00
Other assets:		
Debit balances from companies and individuals,		153 38
Total,		\$267,777 33

## GENERAL BALANCE SHEET.—CR.

Capital stock,	\$150,000 00
Unfunded debt,	68,553 01
Notes payable,	\$35,000 00
Vouchers and accounts,	33,553 01
Profit and loss or income accounts,	49,224 32
Total,	\$267,777 33

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment,	\$261,081 95
Average cost per mile of road, not including sidings (40.75 miles),	6,406 92
Proportion of cost of construction for Michigan,	261,081 95

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings,	\$90,081 65
Machinery and tools,	1,322 10
New cars,	877 00
Total charges,	\$92,280 75
Total charges to property account as above,	92,280 75
Property sold and credited,	None.
Net addition to property account,	\$92,280 75

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

## Main line and branches:

Local fares, - - - - -	\$482 16	
Total passenger fares, - - - - -	\$482 16	
Total passenger department earnings, - - - - -		\$482 16
Proportion for Michigan, - - - - -	\$482 16	
Per mile of road, - - - - -	11 83	

## FREIGHT EARNINGS.

## Main line and branches:

Local traffic, - - - - -	\$44,203 83	
Total traffic, - - - - -	\$44,203 83	
Total freight department earnings, - - - - -		\$44,203 83
Proportion for Michigan, - - - - -	\$44,203 84	
Per train mile, - - - - -	74	
Per mile of road, - - - - -	1,084 76	
Total transportation earnings, - - - - -		\$44,685 99
Transportation earnings per mile of road, - - - - -	1,096 59	
Transportation earnings per train mile, - - - - -	74	
Total earnings from operation of road, - - - - -	\$44,685 99	
Total earnings per mile of road, - - - - -	1,096 59	
Total earnings per train mile, - - - - -	74	
Proportion of taxable earnings for Michigan, - - - - -	44,685 99	
Total taxable earnings per mile of road in Michigan, - - - - -	1,096 59	
Total income from all sources, - - - - -		\$44,685 99
Proportion of income for Michigan, - - - - -		44,685 99

## ANALYSIS OF EXPENSES.

CLASS 1. *Maintenance of Way and Buildings.*

Repairs of road way and track,	
Renewals of rails,	
Renewals of ties,	
Repairs of bridges, including culverts and cattle guards,	\$278 02
Repairs of fences, road crossings, and signs,	
Repairs of buildings,	
Total, - - - - -	\$278 02

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives, - - - - -	}	\$2,928 50
Repairs of passenger cars, - - - - -		
Repairs of freight cars, - - - - -		
Total, - - - - -		\$2,928 50

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	}	\$19,815 84
Water supply, - - - - -		
Oil and waste, - - - - -		
Locomotive service, - - - - -		
Passenger train service, - - - - -		
Passenger train supplies, - - - - -		
Mileage of passenger cars, - - - - -		
Freight train service, - - - - -		
Freight train supplies, - - - - -		
Mileage of freight cars, - - - - -		
Telegraph expenses (maintenance and operating), - - - - -		
Damage and loss of freight and baggage, - - - - -		
Damages to property and cattle, - - - - -		
Personal injuries, - - - - -		
Agents and station service, - - - - -		
Station supplies, - - - - -		
Total, - - - - -		\$19,815 84

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company, - - - - -	\$675 00
Insurance, - - - - -	46 00
Contingencies, - - - - -	22 51
Taxes, - - - - -	631 95
Total, - - - - -	\$1,375 46

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - - - -	1.14	\$278 02
Maintenance of motive power and cars, - - - - -	12.	2,928 50
Conducting transportation, - - - - -	81.22	19,815 84
General expenses, including taxes, - - - - -	5.64	1,375 46
Total operating expenses, and taxes, - - - - -	100.00	\$24,397 82
Operating expenses and taxes per mile of road, - - - - -	\$598 72	
Operating expenses and taxes per train mile run, for trains earning revenue (60,000 miles), - - - - -	41	
Proportion of operating expenses and taxes for Michigan, main line, - - - - -	\$24,397 82	

Total proportion of expenses for Michigan,		\$24,397 82
Percentage of expenses to earnings,	54.60	
Net earnings per mile of road,	\$497 87	
Net earnings per train mile,	34	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

Main River Landing, H. & B. Camp 18, Dec. 10, 1889.

## MAIN LINE.

	Miles, 100ths,	Miles, 100ths,
In Michigan:		
Main River Landing to H. & B. Camp 18,	32.00	
Total length completed,		32.00

## BRANCHES.

From Camp 7 switch to Camp 7,	1 50	
From Camp 13 to south terminal,	1 25	
From Camp 15 to south terminal,	1 00	
From Camp 10 to south terminal,	1 00	
From main line to Camp 32,	1 00	
From main line to Camp 10,	3 00	
Total length of branches owned by company,		8 75
Total length of branches owned by company in Michigan,	8 75	
Total length of road belonging to this company,		40 75
Total length of road belonging to this company in Michigan,	40 75	
Aggregate length in Michigan, of sidings, spurs, and other tracks not above enumerated,		1 00
Aggregate length of tracks in Michigan belonging to this company, computed as single track,		41 75
Gauge of track, 4 feet, 8½ inches.		

Total miles operated by the company,	Total Miles, In Michigan,	
	40 75	40 75

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of 2; Aggregate length, feet,	240 00
Total, - - - 2; - - - - -	240 00

*Draw Bridges in Michigan.*

How many on your line?	None.
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*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?  
Duluth, South Shore & Atlantic R. R., at Seney.

At what crossings are interlocking and derailing switches in operation?

None yet.

Number of crossings of highways at grade in this State, 3

*Stations.*

Number of stations on whole line, 8

Same in Michigan, 8

*Employees.*

Number of persons regularly employed on all roads operated  
by company, including officials, 46

Same in Michigan, 46

Classify your employees as per following list:

	Number.
Brakemen, 1	3
Conductors, -	3
Engineers, -	3
Firemen, -	3
Laborers, -	29

REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? None.

*Road Bed and Track.*

Number of track sections in Michigan, 4

Average length of sections (miles), 8

Average number of men in each section gang, 4

New rails put in track:

Steel (tons, 140.4), miles, 16

Total miles of track laid with new rails, 16

*Bridges and Culverts.*

New bridges built during the year, 1

Location.	Kind.	Material.	Month Built.	Feet in Length.
Sney .....	Wood piles.....	30 ft. steel girder.	October .....	190
Total .....				190

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - -	2	\$14,962 99
Total, - - - - -	2	\$14,962 99
Number of platform cars, - - -	57	19,729 71
Number of conductors' way cars, - - -	1	877 00
Total, - - - - -	58	\$35,569 70
Number of locomotives equipped with power brakes, - - - - -	2	
What patterns of power breaks have you in use, and number of locomotives and cars with each? American Steam Brake Company. Locomotives—2. No cars.		

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by freight trains during the year, - - -	60,000
Total mileage of trains earning revenue, - - -	60,000

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of local passenger carried, - - -	1,004		
Total number of passengers carried, - - -	1,004		
Total passenger mileage, or passengers carried one mile, - - -		12,048	
Average distance traveled by each passenger, - - -		12	
Average amount received from each passenger, - - -			\$00.48
Average rate of fare per mile for local passengers, - - -			00.04
Average rate of fare per mile for all passengers, - - -			00.04

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of local freight carried, - - -	139,080		
Total tons of freight carried, - - - - -	139,080		
Total mileage of local freight, - - - - -		1,420,658	
Total freight mileage, or tons carried one mile, - - -		1,420,658	
Average ton haul for local freight, - - - - -		10.21	
Average ton haul for all freight, - - - - -		10.21	
Average amount received for each ton haul, - - -			\$0 32
Average rate per ton per mile, received for local freight, - - -			03
Average rate per ton per mile, received for all freight, - - -			03

*Freight Forwarded at Michigan Stations.*

	Tons.
Lumber and forest products, . . . . .	137,115
Lumbermen's supplies, . . . . .	1,965
Total forwarded, . . . . .	139,080

*Tonnage of Articles Transported--Entire Road.*

	Tons.	Per Cent.
Lumber and forest products, . . . . .	137,115	98.59
Merchandise and other articles not enumerated above, . . . . .	1,965	1.41
Total tons carried, . . . . .	139,080	100.00

## ADDITIONAL QUESTIONS.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
None.

STATE OF MICHIGAN, }  
COUNTY OF WAYNE, } ss.

M. S. Smith, President, and J. C. McCaul, Secretary of the Manistique Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this Company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said Company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ] Signed, M. S. SMITH, *President.*

J. C. McCAUL, *Secretary.*

Subscribed and sworn to before me this 19th day of March, A. D. 1890.

[ L. S. ]

G. H. STALKER,  
*Notary Public, Wayne County.*



ANNUAL REPORT.  
OF THE  
BATTLE CREEK & STURGIS RAILWAY COMPANY,  
(Formerly St. Louis, Sturgis & Battle Creek Railroad Company.)

*For the Period Beginning September 1 and Ending December 31, 1889.*

[Filed March 24, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, H. A. GARDNER, Chicago, Ill.  
*Vice President*, C. W. HILLARD, Chicago, Ill.  
*Secretary and Treasurer*, J. H. KINGWILL, Chicago, Ill.  
*Auditor*, BRUCE ELLIS, Battle Creek.  
*General Superintendent*, W. IRVING FOX, Battle Creek.  
*Chief Engineer*, J. F. CAREY, Battle Creek.  
*Attorney*, S. S. HULBERT, Battle Creek.

DIRECTORS.

ROBT. D. MCFADON, Chicago, Ill.  
JAS. P. GARDNER, Chicago, Ill.  
J. H. KINGWILL, Chicago, Ill.  
S. H. SPOONER, Chicago, Ill.  
CHAS. W. HILLARD, Chicago, Ill.  
H. A. GARDNER, Chicago, Ill.  
EWD. F. LAWRENCE, Chicago, Ill.

Terms expire June 4, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

**When chartered or articles of association filed**,—November 14, 1889.

**Number of stockholders at date of last election**, - - - - - 11

**Number of stockholders in Michigan at same date**, - - - - - None.

**Amount of full paid stock held in Michigan at same date**, - - - - - None.

**Date of annual meeting of stockholders**,—First Wednesday in June.

**Fiscal year of company ends**,—Not yet fixed.

**General offices of the company are located at** Chicago, Ill.

## REMARKS.

The Company is still in a formative state and its organization not fully completed. The property was placed in the hands of a receiver, Mr. Wm. K. Ackerman, on the 14th of March and was operated by him until September 1st following, when it passed into the control of the present company. A statement of the earnings during the receivership of Mr. Ackerman is appended to this report.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income,		\$9,415 23
Total expenses, including taxes,	\$8,208 23	
Net income,		\$1,207 00
Rentals of buildings, tracks, etc.,	\$305 31	
Rentals of engines and cars,	540 74	
		846 05
Balance for the year,		360 95
Balance forward to next year,	\$360 95	
	\$360 95	\$360 95

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$1,000,000 00
Par value of shares,	\$100
No. of shares issued,	5,000
Amount paid in on common,	* \$500,000 00
Total amount paid in, as per books of the company,	500,000 00
Paid in per mile of road owned by company,	
—miles, 41.50,	\$12,048 19

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	When Due.	Interest.		Amount.
		Rate.	Payable.	
* First mortgage, December 1, 1899.....	Dec. 1, 1899..	3%	New York.....	\$500,000
Total funded debt.....				\$500,000

\* Stock being issued for part cost of company's property above amount is entered as being fully paid.

\* The above amount of bonds have been duly authorized by resolution of the board of directors to be issued in payment for the company's property and are in process of preparation.

## UNFUNDED DEBT.

Unfunded debt, - - - - - None.

## RECAPITULATION.

Total funded debt,	\$500,000 00
Total debt liabilities,	\$500,000 00
Amount of debt liabilities per mile of road (41.50 miles),	12,048 19
Total amount of stock and debt,	1,000,000 00
Stock and debt per mile of road (41.50 miles),	24,096 38

## GENERAL BALANCE SHEET.—Dr.

Construction account,	\$1,000,000 00
Equipment account (\$8,757.15).	
Cash Items:	
Cash,	\$150 92
Bills receivable,	685 24
Due from agents,	180 14
Total,	1,016 30
Total,	\$1,001,016 30

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	\$500,000 00
Funded debt,	500,000 00
Total,	\$1,000,000 00
Profit and loss or income accounts,	1,016 30
Total,	\$1,001,016 30

## COST OF ROAD AND EQUIPMENT.

*Purchased by Present Company.*

When purchased,—November, 14, 1889.	
Original cost to present company, of road and equipment,	\$1,000,000 00
Total cost to date of report,	\$1,000,000 00
Average cost per mile of road (not including sidings —41.50 miles),	24,096 38
Proportion of cost for Michigan,	1,000,000 00

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares,	\$3,166 00
Total passenger fares,	\$3,166 00

Express and baggage,	862 33
Mails,	706 97
Other sources,	13 24

Total passenger department earnings, \$4,748 54

Proportion for Michigan,	\$4,748 54
Per train mile,	28 60
Per mile of road,	114 10

## FREIGHT EARNINGS.

Main line and branches:

Local traffic, \$4,666 69

Total traffic, \$4,666 69

Total freight department earnings, \$4,666 69

Proportion for Michigan,	\$4,666 69
Per train mile,	28 11
Per mile of road,	112 45

Total transportation earnings, \$9,415 23

Transportation earnings per mile of road,	226 55
Transportation earnings per train mile,	56.71

Total earnings from operation of road \$9,415 23

Total earnings per mile of road,	226 55
Total earnings per train mile,	56.71

Proportion of taxable earnings for Michigan, 9,415 23

Total taxable earnings per mile of road in Michigan, 226 55

Total income from all sources, \$9,415 23

Proportion of income for Michigan, 9,415 23

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track,	\$2,632 13
Repairs of bridges, including culverts and cattle guards,	99 05
Repairs of fences, road crossings and signs,	60 93
Repairs of buildings,	16 55

Total, \$2,808 66

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives,	\$161 39
Repairs of passenger cars,	115 68
Repairs of freight cars,	162 49

Total, \$439 56

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives,	\$925 33
Water supply,	30 56
Oil and waste,	97 88
Locomotive service,	881 63
Passenger train service,	375 22
Passenger train supplies,	1 98
Freight train service,	375 22
Freight train supplies,	2 00
Damages to property and cattle,	20 17
Agents and station service,	1,133 42
Station supplies,	83 50
<b>Total,</b>	<b>\$3,926 91</b>

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company,	\$805 77
Stationery and printing,	81 48
Contingencies,	145 85
<b>Total,</b>	<b>\$1,033 10</b>

## RECAPITULATION OF EXPENSES.

	Per cent of Expenses.	
Maintenance of way and buildings,	34.22	\$2,808 66
Maintenance of motive power and cars,	5.35	439 56
Conducting transportation,	47.84	3,926 91
General expenses, including taxes,	12.59	1,033 10
<b>Total operating expenses and taxes,</b>	<b>100.00</b>	<b>\$8,208 23</b>
Operating expenses and taxes per mile of road,	\$197 78	
Operating expenses and taxes per train mile run, for trains earning revenue (17,220 miles),	47	
Proportion of operating expenses and taxes for Michigan:		
Main line,	8,208 23	
<b>Total proportion of expenses for Michigan,</b>		<b>\$8,208 23</b>
Percentage of expenses to earnings,	87.18	
Net earnings per mile of road,	\$25 27	
Net earnings per train mile,	15	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Battle Creek, Mich., to Sturgis, Mich., January, 1889.

## MAIN LINE.

	Miles, 100ths.	Miles, 100ths.
In Michigan, from Battle Creek to Sturgis, - -	41.50	
Total length completed, - - - - -		41.50

## BRANCHES.

Total length of road belonging to this company, - -	41.50
Total length of road belonging to this company in Michigan, -	41.50
Aggregate length in Michigan, of sidings, spurs, and other tracks not above enumerated, - -	3.77
Aggregate length of tracks in Michigan belonging to this company, computed as single track, - -	45.27

Gauge of track, 4 feet 8½ inches.

*Proprietary or Leased Roads Operated by this Company.*

Name, description, and length of each:	Total Miles. In Michigan.
Sturgis, Goshen & St. Louis Railway (so much of this road as lies between Sturgis and the Indiana State line), - - - - -	2.50
Total, - - - - -	2.50
Total miles operated by the company, - - - - -	44.00 44.00

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?	
Cincinnati, Jackson & Mackinaw R. R. at Battle Creek, Mich.	
Michigan Central Air Line R. R. at Colon Junction.	
Grand Rapids & Indiana R. R. at Sturgis.	
Lake Shore & Michigan Southern at Sturgis.	
What railroads cross your road either over or under your grade in this State, and where? None.	
At what crossings are interlocking and derailling switches in operation?	
Cincinnati, Jackson & Mackinaw R. R. crossing at Battle Creek.	
Michigan Central Air Line Crossing at Colon Junction.	
What pattern or patterns have you adopted?	
Gravitt at Colon Junction; Randolph at Battle Creek.	
Number of crossings of highways at grade in this State, - - - - -	48
Number of crossings of highways at grade in this State at which there are gates or flagmen, - - - - -	None.
Are your frogs and guard rails blocked as required by Act 174, Session Laws 1883? - - - - -	Yes.

*Stations.*

Number of stations on whole line, - - - - -	10
Same in Michigan, - - - - -	10

*Employés.*

Number persons regularly employed on all roads operated by company, including officials, - - - - -	42
Same in Michigan, - - - - -	42

Classify your employés as per following list:

	NUMBER.
Baggagemen, - - - - -	2
Brakemen, - - - - -	2
Conductors, - - - - -	2
Engineers, - - - - -	2
Firemen, - - - - -	2
Laborers, - - - - -	19
Shopmen, - - - - -	2
Others, - - - - -	11

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - -	83
Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed:	
All completed.	

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	6
Average length of sections (miles), - - - - -	7
Average number of men in each section gang, - - - - -	3
Number of new ties put in whole line during the year, - - - - -	2,700
Number of new ties put in track in Michigan, - - - - -	2,700
Average number of new ties per mile of road, - - - - -	62

*Bridges and Culverts.*

Timber culverts replaced during the year - - - - -	2
With iron pipe,—number, - - - - -	1
With timber,—number, - - - - -	1

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	1	\$3,200 00
Total, - - - - -	1	\$3,200 00
Number of passenger cars—8 wheel, including official cars, - - - - -	1	3,400 00
Number of express and baggage cars, - - - - -	1	2,000 00
Total, - - - - -	2	\$8,600 00
Number of locomotives equipped with power brakes, - - - - -	1	
Number of passenger-train cars equipped with power brakes, - - - - -	2	

What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse Automatic. Two locomotives and four cars. Half of this number are leased.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Do not own any.

What pattern or patterns have you adopted for use? Do not own any.

How are your passenger cars heated? The one we own heated with Baker heater.

### MILEAGE, TRAFFIC, ETC.

#### *Train Mileage.*

Sept. 1 to Dec. 31, 1889:	
Miles run by mixed trains, - - - - -	17,220
Total mileage of trains earning revenue, - - -	17,220

#### *Passenger Traffic.*

No traffic accounts open.

#### *Freight Forwarded at Michigan Stations.*

	Tons.
Grain, - - - - -	1,427
Flour, - - - - -	4
Provisions (beef, pork, lard, etc.), - - - - -	6
Animals, - - - - -	373
Other agricultural products, - - - - -	452
Lumber and forest products, - - - - -	1,980
Coal, - - - - -	541
Plaster, lime and cement, - - - - -	54
Salt, - - - - -	82
Pig and bloom iron, - - - - -	354
Other iron and castings, - - - - -	51
Manufactures,—articles shipped from point of production, - - -	9
Merchandise and other articles not enumerated above, - - -	489
Total forwarded, - - - - -	5,822

#### *Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	1,427	24.51
Flour, - - - - -	4	.06
Provisions (beef, pork, lard, etc.), - - - - -	6	.10
Animals, - - - - -	373	6.41
Other agricultural products, - - - - -	452	7.76
Lumber and forest products, - - - - -	1,980	34.00
Coal, - - - - -	541	9.29
Plaster, lime and cement, - - - - -	54	.92
Salt, - - - - -	82	1.41
Pig and bloom iron, - - - - -	354	6.08



	Tons.	Per Cent.
Other iron and castings,	51	.91
Manufactures,—articles shipped from point of production,	9	.15
Merchandise and other articles not enumerated above,	489	8.40
Total tons carried,	5,822	100.00

## ADDITIONAL QUESTIONS.

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

United States Express Company. They pay us two hundred and ten dollars and ninety cents (\$210.90) per month. Their business is general. We take their freight at depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
41½ miles. It belongs to the Postal Telegraph Cable Company.

STATE OF ILLINOIS, }  
COUNTY OF COOK, } ss.

Henry A. Gardner, President, and J. H. Kingwill, Secretary, of the Battle Creek & Sturgis Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

Signed, HENRY A. GARDNER, *President.*  
[ L. S. OF R. R. ] J. H. KINGWILL, *Secretary.*

Subscribed and sworn to before me this 21st day of March, A. D. 1890.  
[ L. S. ] SIMEON W. KING,  
A commissioner of deeds for the State of Michigan residing in Chicago,  
Illinois.

REPORT OF EARNINGS  
OF THE  
ST. LOUIS, STURGIS & BATTLE CREEK RAILROAD  
COMPANY,

WM. K. ACKERMAN, Receiver.

From the 14th of March, 1889, to August 31, 1889.

The following are the earnings of the St. Louis, Sturgis & Battle Creek Railroad Company, during the above period of 1889:

For transportation of freight,	\$3,478 29
For transportation of passengers,	4,115 28
For transportation of mails,	870 96
For transportation of express,	1,265 40
For miscellaneous earnings,	6 00
Total earnings for period,	\$9,735 93

STATE OF MICHIGAN, }  
COUNTY OF CALHOUN, } ss.

W. K. Ackerman, being duly sworn, says that the period of time specified in the annexed statement of earnings is the period during which he was receiver of the railroad specified in said report, and that said report is in all respects true, to the best knowledge, information and belief of him, the said deponent.

Signed,

W. K. ACKERMAN.

Subscribed and sworn to before me at Battle Creek, Michigan, March 15, 1890.

STUART S. HULBERT,  
Notary Public.

ANNUAL REPORT  
OF THE  
BAY CITY & BATTLE CREEK RAILWAY COMPANY,  
(Formerly Battle Creek & Bay City Railway.)

*For the Year Ending December 31, 1889.*

[Filed March 24, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, H. A. GARDNER, Chicago, Illinois.

*Secretary and Treasurer*, J. H. KINGWILL, Chicago, Illinois.

DIRECTORS.

ROBT. D. McFADON, Chicago, Illinois.

JAMES P. GARDNER, Chicago, Illinois.

J. H. KINGWILL, Chicago, Illinois.

S. H. SPOONER, Chicago, Illinois.

CHAS. W. HILLARD, Chicago, Illinois.

HENRY A. GARDNER, Chicago, Illinois.

EDWD. F. LAWRENCE, Chicago, Illinois.

Terms expire June 4, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—November 14, 1889.

Number of stockholders at date of last election,	11
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Number of stockholders in Michigan at same date,	None.
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Amount of full paid stock held in Michigan at same date,	None.
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Date of annual meeting of stockholders,—Not determined.

Fiscal year of company ends,—Not determined.

General offices of the company are located at,—Not determined.

REMARKS.

This company was organized to take the railroad and property of the Battle Creek & Bay City Railway Company which had been sold under foreclosure of its mortgage in September, 1889. The present company has done nothing so far with the property except acquire it.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$1,000,000 00
Par value of shares, - - - \$100 00	
No. of shares issued, - - - 3,000	
*Amount paid in on common, - - - \$300,000 00	
Total amount paid in, as per books of the company, -	\$300,000 00
Paid in per mile of road owned by company, —17.30 miles, - - - - -	\$17,341 00

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Bonds have been prepared but none are yet issued. The amount authorized on present road is \$250,000, \$178,000 of these to be paid by purchase of present road. Rate of interest 3%, due in 1989 at New York.

## RECAPITULATION.

Total funded debt, not issued but authorized, - - -	\$250,000 00
Total debt liabilities, - - - - -	\$250,000 00
Amount of debt liabilities per mile of road (17.30 miles), -	14,450 86
Total amount of stock and debt, - - - - -	\$550,000 00
Total stock and debt per mile of road (17.30 miles), -	31,791 86

*Interest on the Funded Debt.*

What is the amount of same due each year, - - - - -	\$7,500 00
Was it paid for the last year? None due.	

## COST OF ROAD AND EQUIPMENT.

*Purchased by Present Company.*

When purchased,—November 14, 1889.	
Original cost to present company of road and equipment,	\$550,000 00
Amount expended since purchase, account of construction,	Nothing.
Amount expended since purchase, account of equipment,	Nothing.
Total cost of road and equipment, - - - - -	\$550,000 00
Average cost of same per mile, - - - - -	31,791 90
Proportion of cost of road and equipment for Michigan, -	550,000 00

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
Dec. 27, 1889.

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\*The stock issued to the amount of \$300,000.00 was by articles of incorporation declared paid in acquiring the property of the Battle Creek & Bay City Railway Company.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan:		
Midland to West Bay City, - - - - -	17 30	
Total length completed, - - - - -		17 30
Total length of road belonging to this company, - - - - -		17 30
Total length of road belonging to this company in Michigan, - - - - -	17 30	
Aggregate length of sidings, spurs, and other tracks not above enumerated, - - - - -		85
Same in Michigan, - - - - -	85	
Aggregate length of tracks belonging to this company, computed as single track, - - - - -		18 15
Same in Michigan, - - - - -	18 15	
Gauge of track, 4 feet 8½ inches.		

STATE OF ILLINOIS, }  
COUNTY OF COOK. } ss.

Henry A. Gardner, President, and J. H. Kingwill, Secretary, of the Bay City & Battle Creek Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ] Signed, HENRY A. GARDNER, *President*,  
J. H. KINGWILL, *Secretary*.

Subscribed and sworn to before me this 21st day of March, A. D. 1890.

SIMEON W. KING,

*A commissioner of deeds for the State of Michigan, residing at Chicago, in Illinois.*

ANNUAL REPORT  
OF THE  
CHICAGO & GRAND TRUNK RAILWAY COMPANY,

*For the Year Ending December 31, 1889.*

[Filed March 28, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, SIR JOSEPH HICKSON, Montreal, Province of Quebec.  
*Vice President*, L. J. SEARGEANT, Montreal, Province of Quebec.  
*Secretary and Assistant to the President*, CHARLES PERCY, Montreal, Quebec.  
*Treasurer*, JAMES H. MUIR, Detroit, Mich.  
*General Manager*, W. J. SPICER, Detroit, Mich.  
*Superintendent*, A. B. ATWATER, Detroit, Mich.  
*Assistant Superintendent*, A. R. MCINTYRE, Battle Creek, Mich.  
*Chief Engineer*, GEORGE MASSON, Detroit, Mich.  
*Traffic Manager*, GEO. B. REEVE, Chicago, Illinois.  
*General Passenger and Ticket Agent*, W. E. DAVIS, Chicago, Illinois.  
*Assistant General Freight Agent*, DAVID BROWN, Chicago, Illinois.  
*Solicitor*, E. W. MEDDAUGH, Detroit, Mich.

DIRECTORS.

SIR JOSEPH HICKSON, Montreal, Province of Quebec.  
 L. J. SEARGEANT, Montreal, Province of Quebec.  
 E. W. MEDDAUGH, Detroit, Mich.  
 HENRY HOWARD, Port Huron, Mich.  
 W. C. BEARDSLEY, Auburn, New York.  
 F. A. HOWE, Chicago, Illinois.  
 DE. F. SKINNER, Valparaiso, Indiana.  
 Terms expire April 14, 1890, or when their successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—January 7, 1880.

Number of stockholders at date of last election,	- - - - -	280
Number of stockholders in Michigan at same date,	- - - - -	18
Amount of full paid stock held in Michigan at same date,	- - - - -	\$147,800
Date of annual meeting of stockholders,—Second Wednesday in April.		
Fiscal year of company ends,—December 31.		
General offices of the company are located at Detroit, Mich., and Chicago, Ill.		

## GENERAL EXHIBIT.

	Debit.	Credit.
Total income,		\$3,732,775 42
Total expenses, including taxes,	\$2,804,668 79	
Net income,		928,106 63
Interest on funded debt,	\$659,984 47	
Interest on unfunded debt,	27,439 57	
Rentals of leased lines, etc.,	40,434 08	
Rentals of cars,	69,019 16	
		796,877 28
Balance for the year,		\$131,229 35
Items not included in above as follows:		
Advance to Tol., Sag. & M. R'y toward its bond interest under terms of traffic agreement,	\$8,171 27	
Interest coupons paid, previously in arrear,	123,058 08	
Balance forward to next year,		\$131,229 35
	\$131,229 35	\$131,229 35

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$6,600,000 00
Par value of shares,	\$100 00
Number of shares issued,	66,000
Amount paid in on common,	\$6,600,000 00

Total amount paid in as per books of the company, 6,600,000 00

Paid in per mile of road owned by company,  
—miles, 326.50, \$20,214 40

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage bonds, 1890.....	6%	Jan. 1, 1900.....	London, Eng.	\$6,000,000
Second mortgage bonds, 1892.....	5%	Jan. 1, 1922.....	& New York New York.....	6,000,000
Total funded debt.....				\$12,000,000

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For construction.....	.....	\$964,374 39
For equipment.....	.....	
For real estate.....	.....	
For renewals.....	.....	
For miscellaneous.....	.....	
For current balances.....	.....	
Total unfunded debt.....	.....	\$964,374 39

## RECAPITULATION.

Total funded debt,	\$12,000,000 00
Total unfunded debt,	964,374 39
Total debt liabilities,	\$12,964,374 39
Amount of debt liabilities per mile of road (326.50 miles),	39,707 11
Total amount of stock and debt,	\$19,564,374 39
Stock and debt per mile of road,—326.50 miles,	59,921 51

## GENERAL BALANCE SHEET.—Dr.

Construction and equipment account,	\$18,403,203 65
Cash items:	
Cash,	\$178,231 06
Due from agents,	74,052 68
	252,283 74
Other assets:	
Materials and supplies,	\$295,708 82
Debit balances from companies and individuals,	613,178 18
	908,887 00
Total,	\$19,564,374 39

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	\$6,600,000 00
Funded debt,	12,000,000 00
	\$18,600,000 00
Unfunded debt:	
Interest unpaid (due January 1, 1890),	\$221,578 91
Vouchers and accounts,	601,223 94
Other liabilities (list as follows):	
Salaries and wages (paid January, 1890,)	141,571 54
	964,374 39
Total,	\$19,564,374 39



## COST OF ROAD AND EQUIPMENT.

*Purchased by Present Company.*

When purchased,—January 7, 1880.

Original cost to present company, of road and equipment,	\$12,889,800 78
Amount expended since purchase, account of construction,	4,119,654 87
Amount expended since purchase, account of equipment,	1,393,748 00

Total cost to date of report,	\$18,403,203 65
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Average cost per mile of road, not including sidings—

326.50 miles,	56,365 10
Proportion of cost for Michigan,	12,625,781 37

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions, new sidings, etc.,	\$81,466 34
Second track,	9,829 73
New buildings, etc.,	17,666 25
Bridging,	19,998 09
New locomotives,	27,000 00
New cars,	44,500 00
Total,	\$200,460 41

Total charges to property account as above,	\$200,460 41
Property sold and credited,	235,100 00
Net credit to property account,	34,639 59

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line and branches:

Local fares,	\$447,153 76
Through fares,	567,249 30

Total passenger fares,	\$1,014,403 06
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Express and baggage,	57,198 24
Mails,	41,086 09

Total passenger department earnings,	\$1,112,687 39
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Proportion for Michigan,	\$743,406 73
Per train mile,	92
Per mile of road,	3,318 78

## FREIGHT EARNINGS.

## Main line and branches:

Local traffic,	\$799,301 79	
Through traffic,	1,819,181 64	
Total traffic,	\$2,618,483 43	
Total freight department earnings,		\$2,618,483 42
Proportion for Michigan,	\$1,749,456 52	
Per train mile,	1 13	
Per mile of road,	7,810 07	
Total transportation earnings,		\$3,731,170 82
Transportation earnings per mile of road		
—335.27 miles operated,	\$11,128 85	
Transportation earnings per train mile		
—3,528,648,	1 06	
From other sources,	1,604 60	
Total earnings from operation of road,		\$3,732,775 42
Total earnings per mile of road,—335.27		
miles operated,	11,133 64	
Total earnings per train mile,—3,528,648,	1 06	
Proportion of taxable earnings for Michigan,	2,493,935 32	
Total taxable earnings per mile of road in		
Michigan,	11,133 64	
Total income from all sources,		\$3,732,775 42
Proportion of income for Michigan,		2,493,935 32

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track,	\$194,981 05
Renewals of rails and ties,	93,293 34
Repairs of bridges, including culverts and cattle guards,	20,453 18
Repairs of fences, road crossings, and signs,	9,881 77
Repairs of buildings,	40,878 24
Total,	\$359,487 58

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotive,	\$176,441 23
Repairs of passenger cars,	78,909 09
Repairs of freight cars,	149,875 68
Total,	\$405,226 00

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	\$350,584 75
Water supply, - - - - -	15,572 39
Oil and waste, - - - - -	32,528 89
Locomotive service, - - - - -	306,624 22
Passenger train service, - - - - -	72,209 03
Passenger train supplies, - - - - -	8,679 87
Mileage of passenger cars, - - - - -	49,297 33
Freight train service, - - - - -	289,752 62
Freight train supplies, - - - - -	17,359 74
Mileage of freight cars, - - - - -	241,431 85
Telegraph expenses (maintenance and operating), - - - - -	63,000 50
Damage and loss of freight and baggage, - - - - -	4,013 62
Damages to cattle, - - - - -	867 63
Personal injuries, - - - - -	24,000 00
Agents and station service, - - - - -	121,599 50
Station supplies, - - - - -	12,683 89
<b>Total, - - - - -</b>	<b>\$1,610,205 83</b>

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company, - - - - -	\$37,900 00
Salaries of clerks in general offices, - - - - -	64,305 50
Law expenses, - - - - -	13,564 09
Insurance, - - - - -	6,457 62
Stationery and printing, - - - - -	33,956 92
Outside agencies and advertising, - - - - -	137,341 72
Contingencies, - - - - -	14,901 99
Taxes, - - - - -	121,321 54
<b>Total, - - - - -</b>	<b>\$429,749 38</b>

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - - - -	12.82	\$359,487 58
Maintenance of motive power and cars, - - - - -	14.45	405,226 00
Conducting transportation, - - - - -	57.41	1,610,205 83
General expenses, including taxes, - - - - -	15.32	429,749 38
<b>Total operating expenses and taxes, - - - - -</b>	<b>100.00</b>	<b>\$2,804,668 79</b>
Operating expenses and taxes per mile of road, —335.27 miles, - - - - -	\$8,365 40	
Operating expenses and taxes per train mile run, for trains earning revenue,—3,528,648 miles, - - - - -	80	
Proportion of operating expenses and taxes for Michigan:		
Main line, - - - - -	1,848,540 57	
<b>Total proportion of expenses for Michigan, - - - - -</b>		<b>\$1,848,540 57</b>

Percentage of expenses to earnings,—75.14%.

Net earnings per mile of road,—335.27 miles, 2,768 24

Net earnings per train mile,—3,528,648 miles, 26

#### DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Port Huron, Mich., to Chicago, Illinois, February 1, 1880.

#### MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Port Huron, to Indiana State Line,	224.00	
In Indiana, from Mich. State Line to Ills. State Line,	80.62	
In Illinois, from Ind. State Line to 51st street, Chicago,	21.88	
Total length completed,		326.50
Length of double track on main line,	.70	
Total length of road belonging to this company,		326.50
Total length of road belonging to this company in Michigan,	224.00	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,	48.30	
Aggregate length of tracks in Michigan belonging to this company computed as single track,		272.30
Gauge of track, 4 feet 8½ inches.		

#### *Proprietary or Leased Roads Operated by this Company.*

Name, description and length of each:

	Total Miles.	In Michigan.
Grand Trunk Junction R'y 49th street, Chicago extending from Elsdon, Illinois, to Chicago & Western Indiana R. R. Junction,	3.90	
Chicago & West. Indiana R. R. extending from Chicago & Western Indiana R. R. Junction to Polk street depot Chicago,	4.87	
Total,	8.77	
Total miles operated by the company,	335.27	224.00

#### *Number of Bridges and Trestles in Michigan.*

Iron bridges, number of	16;	Aggregate length, feet,	1,568
Wooden trestles, number of	58;	Aggregate length, feet,	3,519
Total,	74;		5,087

#### *Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Grand Trunk Ry. at Chicago & Grand Trunk Jct. near Port Huron.

Bay City Division Michigan Central R. R. at Lapeer.

Flint & Pere Marquette R. R. at Flint.  
 Detroit, Grand Haven & Milwaukee Ry. at Durand.  
 Cincinnati, Saginaw & Mackinaw R. R. at Durand.  
 Toledo, Ann Arbor & North Michigan R. R. at Durand.  
 Detroit, Lansing & Northern R. R. at Trowbridge.  
 Michigan Central R. R. at Lansing, Charlotte, Battle Creek and Cassopolis.  
 Lake Shore & Michigan Southern Ry. at Lansing and Schoolcraft.  
 Cincinnati, Jackson & Mackinaw R. R. at Battle Creek.  
 Grand Rapids & Indiana at Vicksburg.

What railroads cross your road either over or under your grade in this State, and where?

Over,—None.

Under,—Pontiac, Oxford & Northern near Imlay City.

At what crossings are interlocking and derailing switches in operation?  
 Lansing and Nichols.

What pattern or patterns have you adopted? Union Switch and Signal Company's.

Number of crossings of highways at grade in this State, 263

Number of crossings of highways at grade in this State at which there are gates or flagmen, 10

Number of crossings at which there are electric or automatic signals, 1

What pattern or patterns in use? Union Switch and Signal Company's.

Number of crossings of highways over or under railroad—  
 — over 2; under 2, 4

Number of highway bridges 18 feet above track, 2

Number of highway bridges less than 18 feet above track, Nil.

Have safety guards been erected at over-head obstructions, Yes.

Are your frogs and guard rails blocked as required by Act 174, Session Laws 1883? Yes.

How are they treated?

With Hart's patent blocking plank.

#### *Stations.*

Number of stations on whole line, 84

Same in Michigan, 45

#### *Employés.*

Number persons regularly employed on all roads operated by company, including officials, 2,721

Same in Michigan, 1,818

Classify your employés as per following list:

	Number.
Baggagemen,	31
Brakemen,	216
Conductors,	105
Engineers,	148
Firemen,	136
Laborers,	774
Shopmen,	545
Yardmen,	92
Others,	674

*Fencing in Michigan.*

How many miles of fencing have you?	- - - -	456
Give the number of miles required to complete fence both sides of your track in Michigan and the counties in which needed:	- - - - -	None.

*Road Bed and Track.*

Number of track sections in Michigan,	- - - -	45
Average length of sections (miles),	- - - -	5
Average number of men in each section gang,	- - - -	5
Number of new ties put in whole line during the year,	- - - -	178,862
Number of new ties put in track in Michigan,	- - - -	107,298
Average number of new ties per mile of road,	- - - -	479
New rails put in track:		
Steel (tons 1,688) miles, 16.08.		
Total miles of track laid with new rails,	- - - -	16.08

*Bridges and Culverts.*

Amount of trestle work replaced with earth during the year (linear feet),	- - - -	384
Timber culverts replaced during the year,	- - - -	42
With iron pipe,—number,	32	
With timber,—number,	10	

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender,	107	\$856,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender,	24	120,000 00
Total,	131	\$976,000 00
Number of passenger cars—8-wheel, including official cars,	30	114,000 00
Number of express and baggage cars,	17	31,400 00
Number of box freight cars,	148	51,800 00
Number of stock cars,	15	6,000 00
Number of platform cars,	145	36,250 00
Number of conductors' way cars,	63	37,800 00
Other cars as follows:		
1 snow scraper, 2 snow plows, 2 derrick cars and 5 auxiliaries,	10	15,500 00
Total,	428	\$1,268,750 00

What patterns of power breaks have you in use, and number of locomotives and cars with each? Westinghouse—110 locomotives, 30 coaches and 17 mail and baggage cars.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? McCree & Skinner.

How are your passenger cars heated? Baker heaters—hot water.

### MILEAGE, TRAFFIC, ETC.

#### *Train Mileage.*

Miles run by passenger trains during the year,	-	-	1,173,834
Miles run by freight trains during the year,	-	-	2,029,270
Miles run by mixed trains,	-	-	325,544
Total mileage of trains earning revenue,	-	-	3,528,648

#### *Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Number of through passengers carried,	113,949		
Number of local passengers carried,	720,298		
Total number of passengers carried,	834,247		
Total passenger mileage, or passengers carried one mile,		59,120,053	
Average distance traveled by each passenger,		70.9	
Average amount received from each passenger,			\$1 22
Average rate of fare per mile for through passengers,			01.49
Average rate of fare per mile for local passengers,			02.13
Average rate of fare per mile for all passengers,			01.72

#### *Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	1,054,877		
Number of tons of local freight carried,	686,319		
Total tons of freight carried,	1,741,196		
Total mileage of through freight,		348,763,316	
Total mileage of local freight,		88,159,599	
Total freight mileage, or tons carried one mile,		436,922,915	
Average ton haul for through freight,		330.6	
Average ton haul for local freight,		128.5	
Average ton haul for all freight,		250.9	
Average amount received for each ton haul,			\$1 50
Average rate per ton per mile, received for through freight,			00.52
Average rate per ton per mile, received for local freight,			00.91
Average rate per ton per mile, received for all freight,			00.60

*Freight Forwarded at Michigan Stations.*

	Forwarded Tons.
Grain, - - - - -	30,428
Flour, - - - - -	19,502
Provisions (beef, pork, lard, etc.), - - - - -	979
Animals, - - - - -	15,769
Other agricultural products, - - - - -	19,183
Lumber and forest products, - - - - -	110,032
Coal, - - - - -	12,527
Plaster, lime and cement, - - - - -	4,144
Salt, - - - - -	37,154
Petroleum, - - - - -	1,806
Railroad iron, iron and steel rails, - - - - -	36
Pig and bloom iron, - - - - -	785
Other iron and castings, - - - - -	804
Stone, brick and sand, - - - - -	2,356
Manufactures—articles shipped from point of production, - - - - -	17,096
Merchandise and other articles not enumerated above, - - - - -	30,987
Total forwarded, - - - - -	303,588

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	309,382	17.77
Flour, - - - - -	52,147	2.29
Provisions (beef, pork, lard, etc.), - - - - -	302,043	17.35
Animals, - - - - -	164,129	9.43
Other agricultural products, - - - - -	71,035	4.08
Lumber and forest products, - - - - -	147,813	8.50
Coal, - - - - -	82,730	4.75
Plaster, lime and cement, - - - - -	7,678	0.44
Salt, - - - - -	50,037	2.87
Petroleum, - - - - -	4,894	0.28
Railroad iron, iron and steel rails, - - - - -	20,252	1.16
Pig and bloom iron, - - - - -	6,611	0.39
Other iron and castings, - - - - -	10,253	0.59
Ores, - - - - -	4,480	0.26
Stone, brick and sand, - - - - -	95,067	5.44
Manufactures,—articles shipped from point of production, - - - - -	149,098	8.56
Merchandise and other articles not enumerated above, - - - - -	263,547	15.14
Total tons carried, - - - - -	1,741,196	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company guarantee \$50 per day for local busi-



ness averaging 7,000 lbs per day, and pay at same rate for excess if any. Also \$50.34 per day on through business. Freight taken at depot.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
Cannot say. Western Union Telegraph Company.

TRANSPORTATION COMPANIES.

*Sleeping, Drawing-Room and Palace Car Companies.*

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Pullman Palace Car Company, Chicago, Illinois, . . .	\$12,200 40
Wagner Palace Car Company, New York, New York, . . .	22,489 86
	<hr/>
	\$34,690 26

(Terms—3 cents per car per mile paid both companies.)

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Ames Coal Transit Co., Chicago, Illinois . . .	\$1 59
Armour Cudahay Refrigerating Line, South Omaha, Nebraska . . .	46 77
American Live Stock Co., Chicago, Illinois . . .	5,871 76
Atlanta Stone Coal & Lime, Atlanta, Georgia . . .	1 32
Arms Palace Horse Car Co., Chicago, Illinois . . .	149 17
Anglo American Provision Car Co., Chicago, Illinois . . .	317 15
Ayers A. A. & Co., Montreal, Quebec . . .	14 33
American Refrigerating Transit Co., Saint Louis, Missouri . . .	82 96
Armour Refrigerating Line, Chicago, Illinois . . .	8,243 53
Armour Refrigerating Line, Chicago, Illinois . . .	4,479 71
Barrett & Barrett, Chicago, Illinois . . .	2 77
Burton Stock Car Co., Boston, Massachusetts . . .	3 84
Brill J. G. & Co., Philadelphia, Pennsylvania . . .	12 64
Canda Cattle Car Co., New York City . . .	58 97
Col. & H. Coal & Iron Co., Columbus, Ohio . . .	1 49
Chicago Stock Car Co., Buffalo, N. Y. . .	116 35
Central Vt. Hog Cars, Boston, Massachusetts . . .	12,861 62
C. M. & St. P. Milwaukee, Wisconsin . . .	17,841 99
Cygnat Tank Line, Cleveland, Ohio . . .	57
Chicago Refrigerating Car Co., LaFayette, Indiana . . .	3,103 14
Chicago Boston & Liverpool Co., St. Albans, Vermont . . .	15,009 68

Dole, Jacob & Son, Kansas City, Missouri	\$29 22
East St. Louis D. B. Line, Chicago, Illinois	34 65
Ellsworth J. W. Chicago, Illinois	4 73
Frazer Lubricating Co., Chicago, Illinois	63 45
Goodells' Refrigerating Co., Chicago, Illinois	1 59
Globe Refining Co., Marietta, Ohio	1 85
Hammond Refrigerator Line, Chicago, Illinois	16,271 26
Hammond Refrigerator Line, Chicago, Illinois	9,160 03
Joliet Steel Co., Chicago, Illinois	1 59
Jenkins' Live Poultry Co., Chicago, Illinois	1 59
Keystone Palace Horse Car Co., Chicago, Illinois	14 94
Kansas City D. B. Line, Kansas City, Missouri	882 19
Kansas City D. B. Line, Kansas City, Missouri	172 58
Live Poultry Transit Co., Chicago, Illinois	1 59
Mather Stock Car Co., Chicago, Illinois	41 95
Michigan Salt Line, East Saginaw, Michigan	1,861 97
Morris & Company, Chicago, Illinois	1,993 51
Morris & Company, Chicago, Illinois	2,420 09
Merchants Despatch Transit Co., New York City	238 96
Menasha Wooden Ware Co., Chicago, Illinois	4 08
New York Despatch Refrigerator Line, New York City	11,111 03
North Chicago Rolling Mills, Chicago, Illinois	5 98
National Car Co. St. Albans, Vermont	18,232 40
Peerless Tank Line, Cleveland, Ohio	3 46
Pullman Palace Car Co., Chicago, Illinois	6,757 50
Racine Wagon & Car Co., Milwaukee, Wisconsin	57 38
Rogers' Loco. Ex. Co., Philadelphia, Pennsylvania	2 76
Sun Oil Line Co., Toledo, Ohio	80
St. Chas. Car Co., St. Louis, Missouri	3 37
Sheboygan Chair Co., Chicago, Illinois	9 56
Street's Stable Car Co., Chicago, Illinois	2,745 63
Syme & Jones, Chicago, Illinois	1 59
St. Louis Refrigerator Line, St. Louis, Missouri	37 81
Swift's Refrigerator Line, Chicago, Illinois	9,536 90
Swift's Refrigerator Line, Chicago, Illinois	7,245 26
Union Tank Line, New York City	12 98
M. S. Transit Co., Chicago, Illinois	4 78
Wagner Palace Car Co., New York City	14,839 92
Total,	\$172,032 33

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

February 18, A. R. Taylor, brakeman, Attica. Run over getting off train; his own fault

June 13, W. W. Staley, citizen, Lansing. Highway collision.

July 26, L. Mayer, trespasser, Potterville. Run over on company's right of way.

August 20, William Ross, sectionman, Penn. Trying to get on train in motion.

September 12, W. A. Dennison, brakeman, Battle Creek. Walking on track; run over.

December 8, R. Harrington, trespasser, Charlotte. Struck by train on company's right of way.

Railroad Company exonerated in all cases.

#### INJURED.

January 18, D. Thomas, farmer, Bellevue. Highway collision; his carelessness.

January 18, Mrs. D. Thomas, wife, Bellevue. Highway collision; her carelessness.

January 18, Miss Thomas, daughter, Bellevue. Highway collision; her carelessness.

February 1, E. M. Green, yard conductor, Flint. Fell from train, slight internal injury; accidental.

February 4, W. Webster, fireman, Lapeer. Knocked off tank by water spout; accidental.

March 12, J. H. Desmond, engineer, near Charlotte. Finger injured; his carelessness.

March 20, George Craine, brakeman, G. T. Junction. Thumb and finger mashed, coupling cars; his carelessness. Died March 31, of lock jaw.

April 1, M. Needham, brakeman, Bellevue. Two fingers injured, coupling cars; his carelessness.

May 6, W. Archer, brakeman, Durand. Hand and wrist injured, coupling cars; his carelessness.

May 23, A. A. Powell, brakeman, Battle Creek. Collar bone broken, coupling cars; his carelessness.

June 1, G. Creig, trespasser, Cassopolis. Badly injured, stealing ride, getting off train; his carelessness.

June 1, W. H. Wells, yard brakeman, Battle Creek. Knocked off of car, badly hurt; his own carelessness.

June 29, H. Ryan, engineer, Emmet. Run off of open switch, wrecking train, scalded; accidental.

June 29, J. Carroll, baggageman, Emmet. Run off of open switch, wrecking train, legs bruised; accidental.

June 29, G. W. Tittle, brakeman, Emmet. Run off of open switch, wrecking train, legs bruised; accidental.

June 29, Mrs. A. G. Hart, passenger, Emmet. Run off of open switch, wrecking train, injured internally; accidental.

June 29, Mrs. J. T. Laraway, passenger, Emmet. Run off of open switch, wrecking train, face injured; accidental.

June 29, Thomas Wimes, passenger, Emmet. Run off of open switch, wrecking train, side injured; accidental.

June 29, H. B. Moore, passenger, Emmet. Run off of open switch, wrecking train, side injured; accidental.

June 29, J. M. Jewell, passenger, Emmet. Run off of open switch, wrecking train, leg and shoulder injured; accidental.

June 29, A. Baker, passenger, Emmet. Run off of open switch, wrecking train, knees and back injured; accidental.

June 29, J. L. Willett, passenger, Emmet. Run off of open switch, wrecking train, knees and shoulder injured; accidental.

July 6, M. McCarthy, sectionman as cableman, Bellevue. Cable slipped off, unloading gravel, leg broken; accidental.

July 6, B. McQuinn, sectionman as cableman, Bellevue. Cable slipped off, unloading gravel, head injured; accidental.

July 24, J. Cain, engineer, Nichols. Jumping off engine, knee dislocated; his carelessness.

July 31, J. Murr, tresspasser, Emmet. Threw himself under train, back and head injured; his carelessness.

September 9, J. H. Desmond, engineer, Lansing. Collision cars foul, leg injured; accidental.

September 9, C. Jackson, baggageman, Lansing. Collision, cars foul, head cut; accidental.

September 9, C. Koeing, passenger, Lansing. Collision, cars foul, arm and thigh bruised; accidental.

September 9, Mrs. A. Killins, passenger, Lansing. Collision, cars foul, side slightly bruised; accidental.

September 9, Mrs. Towne, passenger, Lansing. Collision, cars foul, injured; accidental.

August 30, D. G. Dwyer, breakman, Marcellus. Coupling cars, fingers smashed; his carelessness.

September 8, J. E. Dunsmore, brakeman, Olivers. Coupling cars, two fingers smashed; his carelessness.

October 7, O. Blodgett, brakeman, Durand. Coupling cars, hand badly injured; his carelessness.

October 8, D. Scouten, conductor, between Charlotte and Potterville. Coupling cars, two fingers smashed; his carelessness.

October 19, H. Chappell, conductor, Flint. Coupling cars, shoulder blade broken; his carelessness.

November 5, L. Upthegrove, brakeman, Durand. Walked off top of car, both ankles sprained; his carelessness.

November 24, C. Pratt, warehouseman, Battle Creek. Coupling cars, shoulder dislocated and rib broken; his carelessness.

November 26, J. W. Edgett, brakeman, Battle Creek. Coupling cars, hand crushed; his carelessness.

December 2, J. S. Reid, brakeman, Battle Creek. Coupling cars, two fingers crushed; his carelessness.

#### TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....				3	2	
Coupling cars.....					12	
Derailments.....				7	3	
Falling from trains.....					1	
Frogs.....						
Getting on and off trains.....		2				
Highway crossings.....			1			
Miscellaneous.....					7	3
Overhead obstructions.....						
Trespassers on trains.....						1
Trespassers on tracks.....		1	2			1
Total.....		3	3	10	25	5

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	6
Number of persons injured during the year,	40
Number of casualties purely accidental,	19
Number resulting from lack of caution, carelessness,	27
Persons killed or injured while intoxicated,	None.
Trespassers and tramps killed or injured,	1
Suicides (attempted),	1

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

Employés.	Killed.	Injured.	Total.
Baggagemen.....		2	2
Brakemen.....	2	12	14
Conductors.....		3	3
Engineers.....		4	4
Firemen.....		1	1
Laborers.....		3	3
Shopmen.....	1		1
Yardmen.....			
Not classified above.....			
Total.....	3	25	28

STATE OF MICHIGAN, }  
COUNTY OF WAYNE. } ss.

William J. Spicer, General Manager, and James H. Muir, Treasurer, of the Chicago & Grand Trunk Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1890, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

W. J. SPICER,  
JAS. H. MUIR,

Subscribed and sworn to before me this 26th day of March, A. D. 1890.

A. B. THOMAS, *Notary Public.*

ANNUAL REPORT  
OF THE  
DETROIT, GRAND HAVEN & MILWAUKEE RAILWAY  
COMPANY,

*For the Year Ending December 31, 1889.*

[Filed March 28, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, SIR JOSEPH HICKSON, Montreal, Quebec.  
*Assistant to the President*, CHARLES PERCY, Montreal, Quebec.  
*Secretary and Treasurer*, JAMES H. MUIR, Detroit, Mich.  
*General Manager*, W. J. SPICER, Detroit, Mich.  
*General Superintendent*, A. B. ATWATER, Detroit, Mich.  
*Chief Engineer*, GEORGE MASSON, Detroit, Mich.  
*Traffic Manager*, JOHN W. LOUD, Detroit, Mich.  
*Assistant General Freight Agent*, JAMES McQUEEN, JR., Detroit, Mich.  
*General Counsel*, E. W. MEDDAUGH, Detroit, Mich.  
*Solicitor*, GEORGE JEROME, Detroit, Mich.

DIRECTORS.

SIR JOSEPH HICKSON, Montreal, Quebec.  
 JOHN PRIDGEON, JR., Detroit, Michigan.  
 ELIJAH W. MEDDAUGH, Detroit, Michigan.  
 AARON B. MAYNARD, Detroit, Michigan.  
 GEORGE F. MOORE, Detroit, Michigan.  
 E. P. HANNAFORD, Montreal, Quebec.  
 W. J. SPICER, Detroit, Michigan.  
 CHARLES STIFF, Hamilton, Ontario.  
 JOSEPH HOBSON, Hamilton, Ontario.

Terms expire first Monday in October 1890, or when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—March 7, 1834, as the Detroit and Pontiac Railroad Company.

Number of stockholders at date of last election,	- - - - -	11
Number of stockholders in Michigan at same date,	- - - - -	5
Amount of full paid stock held in Michigan at same date,	- - - - -	\$250

Date of annual meeting of stockholders,—First Monday in October.

Fiscal year of company ends, December 31.

General offices of the company are located at Detroit, Mich.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -	- - - - -	\$1,076,612 71
Total expenses, including taxes, - - - - -	- - - - -	822,982 81
Net income, - - - - -	- - - - -	\$253,629 90
Interest on funded debt, - - - - -	\$312,000 00	
Interest on unfunded debt, - - - - -	13,307 91	
Rentals of buildings, tracks, etc., - - - - -	3,429 56	
Rentals of engines, cars, etc., - - - - -	18,000 00	
		346,737 47
Balance for the year, a deficit of - - - - -	\$93,107 57	
Items not included in above, as follows:		
Paid by Grand Trunk Ry. Co., - - - - -	- - - - -	93,107 57

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$1,500,000 00
Par value of shares, - - - - -	\$50 00
No. of shares issued, - - - - -	30,000
Amount paid in on common, - - - - -	\$1,500,000 00

Total amount paid in as per books of the company, - - - 1,500,000 00

Paid in per mile of road owned by company

    ---189 miles, - - - - - \$7,936 51

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount Outstanding.
Equipment mortgage bonds, Nov. 14, 1878..	6%	Nov. 14, 1918....	N. York or London	\$2,000,000 00
Consolidated mortgage bonds, Nov. 15, 1878..	6%	Nov. 15, 1918....	"	3,300,000 00
Total funded debt.....				\$5,300,000 00

## UNFUNDED DEBT.

For what Incurred.	Is the Same to be Funded, or How Liquidated.	Amount.
For construction.....		
For equipment.....		
For real estate.....		\$146,000 00
For renewals.....		
For miscellaneous.....		
For current balances.....		\$382,846 65
Total unfunded debt.....		\$1,028,846 65

## RECAPITULATION.

Total funded debt,	\$5,200,000 00
Total unfunded debt,	1,028,646 65
Total debt liabilities,	\$6,228,646 65
Amount of debt liabilities per mile of road,— 189 miles,	32,955 80
Total amount of stock and debt,	\$7,728,646 65
Stock and debt per mile of road,—189 miles,	40,892 31

## GENERAL BALANCE SHEET.—Dr.

Construction and equipment account,	\$6,721,958 51	
Other investments, specifying same:		
Land for enlarging station grounds at Detroit,	154,775 94	
		\$6,876,734 45
Cash items:		
Cash,	\$29,400 72	
Due from agents,	47,394 82	
		76,795 54
Other assets:		
Materials and supplies,	115,841 66	
Debit balances from companies and individuals,	659,275 00	
		775,116 66
Total,		\$7,728,646 65

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	\$1,500,000 00
Funded debt,	5,200,000 00
	\$6,700,000 00
Unfunded debt:	
Interest unpaid,—accrued and unclaimed,	\$83,944 90
Vouchers and accounts,	798,701 75
Other liabilities (list as follows):	
Due on land purchased,	146,000 00
	1,028,646 65
Total,	\$7,728,646 65

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

*Purchased by present company.*

When purchased. September 4, 1878, transferred by receiver October 19, 1878.



Original cost to present company of road and equipment,	\$6,700,000 00
Amount expended since purchase, account of construction,	21,958 51
Total cost to date of report,	6,721,958 51
Average cost of road, not including sidings,—189 miles,	35,565 92
Proportion of cost for Michigan,	6,721,958 51

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## Main line and branches:

New sidings,	\$11,335 76
New buildings,	1,142 85
Total charges,	\$12,478 61
Total charges to property account as above,	\$12,478 61
Property sold and credited,	None.
Net addition to property account,	\$12,478 61

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

## Main line:

Local fares,	\$414,926 07
Through fares,	18,592 34
Total passenger fares,	\$433,518 41
Express and baggage,	25,724 66
Mails,	26,352 49
Total passenger department earnings,	\$485,595 56
Proportion for Michigan,	\$485,595 56
Per train mile,	90
Per mile of road,	2,569 29

## FREIGHT EARNINGS.

## Main line and branches:

Local traffic,	\$505,305 96
Through traffic,	74,921 53
Total traffic,	\$580,227 49
Total freight department earnings,	\$580,227 49
Proportion for Michigan,	\$580,227 49
Per train mile,	1 50
Per mile of road,	3,069 99
Total transportation earnings,	\$1,065,823 05

Transportation earnings per mile of road,	\$5,639 28
Transportation earnings per train mile,	1 15
Miscellaneous receipts from operating account, other than for transportation, as follows:	
From rentals of tracks or terminals,	\$8,097 56
From other sources,	2,692 10
	<hr/>
	\$10,789 66

Total earnings from operation of road, \$1,076,612 71

Total earnings per mile of road,	\$5,696 36
Total earnings per train mile,	1 16
Proportion of earnings for Michigan,	1,076,612 71
Total earnings per mile of road in Michigan,	5,696 36

Total income from all sources,	\$1,076,612 71
Proportion of income for Michigan,	1,076,612 71

## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track,	\$82,273 37
Renewals of rails,	6,459 06
Renewal of ties,	33,817 79
Repairs of bridges, including culverts and cattle guards,	15,591 25
Repairs of fences, road crossings, and signs,	9,867 03
Repairs of buildings,	16,858 63
	<hr/>
Total,	\$164,867 13

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives,	\$42,842 88
Repairs on passenger cars,	25,140 14
Repairs on freight cars,	43,800 45
	<hr/>
Total,	\$111,783 47

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives,	\$86,761 06
Water supply,	3,986 81
Oil and waste,	6,976 57
Locomotive service,	85,972 33
Passenger train service,	23,785 14
Passenger train supplies,	4,800 00
Milage of passenger cars,	2,220 81
Freight train service,	30,958 25
Freight train supplies,	1,200 00
Milage of freight cars,	Cr. 594 29
Telegraph expenses (maintenance and operating),	21,000 00
Damage and loss of freight and baggage,	2,180 89
Damage to property and cattle,	891 30

Personal injuries, - - - - -	\$9,302 20
Agents and station service, - - - - -	145,607 00
Station supplies, - - - - -	9,436 97
Total, - - - - -	<u>\$434,485 04</u>

CLASS 4.—General Expenses.

Salaries of the general officers of the company, - - - - -	\$13,346 66
Salaries of clerks in general offices, - - - - -	28,957 42
Law expenses, - - - - -	6,294 55
Insurance, - - - - -	3,274 92
Stationery and printing, - - - - -	11,704 56
Outside agencies and advertising, - - - - -	16,875 78
Contingencies, - - - - -	5,829 86
Taxes, - - - - -	25,563 42
Total, - - - - -	<u>\$111,847 17</u>

RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - - - -	20.03	\$164,867 13
Maintenance of motive power and cars, - - - - -	13.58	111,783 47
Conducting transportation, - - - - -	52.80	434,485 04
General expenses, including taxes, - - - - -	13.59	111,847 17
Total operating expenses, and taxes, - - - - -	100.00	<u>\$822,982 81</u>
Operating expenses and taxes per mile of road, - - - - -	\$4,354 40	
Operating expenses and taxes per train mile run, for trains earning revenue,—924,158 miles, - - - - -	89	
Proportion of operating expenses and taxes for Michigan, main line, - - - - -	\$822,982 81	
Total proportion of expenses for Michigan, - - - - -		<u>\$822,982 81</u>
Percentage of expenses to earnings, 76.44.		
Net earnings per mile of road, - - - - -	\$1,341 96	
Net earnings per train mile, - - - - -	27	

DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Detroit, Michigan to Grand Haven, Michigan, Nov. 22, 1858.

MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Detroit to Grand Haven, - - - - -	189	
Total length completed, - - - - -		<u>189</u>

	Miles, 100ths.	Miles, 100ths.
Total length of road belonging to this company in Michigan,	189	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,		62.59
Aggregate length of tracks in Michigan belonging to this company, computed as single track,		251.59

Gauge of track, 4 feet 8½ inches.

	Total Miles, In Michigan.
Total miles operated by the company,	189

*Number of Bridges and Trestles in Michigan.*

Iron bridges, number of,	21;	aggregate length, feet,	2,777
Wooden trestles, number of,	42;	aggregate length, feet,	3,045
Total,	63;		5,822

*Draw Bridges in Michigan.*

How many on your line? 2

Where located, when built and length of draw span.

Near Ferrysburg, one in 1869, two openings 75 feet each, and one in 1870, two openings 60 feet each.

Character of structure:

Truss.

Material of which constructed:

Iron.

Height above water, and depth of water under bridge:

1869 bridge, height 8 feet 7 inches, depth of water 24 feet.

1870 bridge, height 9 feet 6 inches, depth of water 16 feet.

How swung, by engine or hand power?

Hand power.

Approaches, straight or curved:

Two straight, two curved.

Do you require all trains to come to a full stop before crossing a draw, and how are they signalled?

Yes, and by distant semaphores.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Grand Trunk Ry., 4 miles west of Detroit.

Detroit & Bay City R. R., 4 miles west of Detroit.

Michigan Air Line Ry., 1 mile east of Pontiac.

Flint & Pere Marquette R. R. at Holly.

Chicago & Grand Trunk at Durand.

Toledo, Ann Arbor & North Michigan Ry. at Durand.

Toledo, Saginaw & Mackinaw at Durand.

Jackson, Lansing & Saginaw R. R. at Owosso.

Detroit, Lansing & Northern R. R. at Ionia.

Lowell & Hastings R. R. at Lowell.

Grand Rapids & Indiana R. R. at Grand Rapids.

Chicago & West Michigan Ry. at Grand Rapids and Ferrysburg.

What railroads cross your road either over or under your grade in this State, and where?

Over grade,—None.

Under grade,—Muskegon, Grand Rapids & Indiana R. R. at Berlin.

At what crossings are interlocking and derailing switches in operation?

None.

Number of crossings of highways at grade in this State, 248

Number of crossings of highways at grade in this State at which there are gates or flagmen, 25

Number of crossings at which there are electric or automatic signals, 5

What pattern or patterns in use? Ordinary vibrating 8-inch bell.

Number of crossings of highways over or under railroad (over 10; under 8), 18

Number of highway bridges 18 feet above track, 5

Number of highway bridges less than 18 feet above track, 5

Have safety guards been erected at over-head obstructions? Yes.

Are your frogs and guard rails blocked as required by act 174, session laws 1883? Yes.

How are they treated? With plank blocking.

#### *Stations.*

Number of stations on whole line, 40

Same in Michigan, 40

#### *Employés.*

Number of persons regularly employed on all roads operated by company, including officials, 1,080

Same in Michigan, 1,080

Classify your employés as per following list:

	Number.
Baggagemen,	22
Brakemen,	47
Conductors,	30
Engineers,	48
Firemen,	48
Laborers,	358
Shopmen,	64
Yardmen,	34
Others,	429
Total,	1,080

#### REPAIRS AND RENEWALS.

##### *Fencing in Michigan.*

How many miles of fencing have you? 385

Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed. Fencing completed.

*Road Bed and Track.*

Number of track sections in Michigan,	37
Average length of sections (miles),	5.1
Average number of men in each section gang,	4
Number of new ties put in whole line during the year,	111,602
Number of new ties put in track in Michigan,	111,602
Average number of new ties per mile of road,	590
New rails put in track:	
Steel (tons, 210), miles,	2
Total miles of track laid with new rails,	2

*Bridges and Culverts.*

Amount of trestle work replaced with earth during year (linear feet),	156
Timber culverts replaced during the year,	24
With iron pipe—number,	13
With timber—number,	11
New bridges built during the year,	None.

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender,	27	\$135,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender,	14	42,000 00
Total,	41	\$177,000 00
Number of passenger cars—12 wheel, including official cars,	2	8,000 00
Number of passenger cars—8 wheel, including official cars,	23	77,000 00
Number of express and baggage cars,	20	38,600 00
Number of box freight cars,	362	135,750 00
Number of stock cars,	44	17,600 00
Number of platform cars,	199	54,725 00
Number of conductors' way cars,	21	14,700 00
Other cars as follows:	29	11,700 00
Total,	700	\$535,075 00

Number of locomotives equipped with power brakes, 14

Number of passenger-train cars equipped with power brakes, 45

Number of freight cars equipped with power brakes,—None.

What patterns of power breaks have you in use, and number of locomotives and cars with each? Westinghouse. Locomotives—14; cars—45.

Are your freight cars being equipped with automatic couplers as required by Act. No. 147, Session Laws of 1885? Waiting Michigan Car Builders' type to be adopted.

What pattern or patterns have you adopted for use? "McCree" and "Aikman," but withdrawing them.

How are your passenger cars heated? Baker heater—hot water.

### MILEAGE, TRAFFIC, ETC.

#### *Train Mileage.*

Miles run by passenger trains during the year,	457,918
Miles run by freight trains during the year,	305,345
Miles run by mixed trains,	160,895
Total mileage of trains earning revenue,	924,158

#### *Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried,	4,251		
Number of local passengers carried,	591,851		
Total number of passengers carried,	596,102		
Total passenger mileage, or passengers carried one mile,		18,189,565	
Average distance traveled by each passenger,		30.5	
Average amount received from each passenger,			73
Average rate of fare per mile for through passengers,			02.31
Average rate of fare per mile for local passengers,			02.39
Average rate of fare per mile for all passengers,			02.38

#### *Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	87,925		
Number of tons of local freight carried,	479,950		
Total tons of freight carried,	567,875		
Total mileage of through freight,		16,617,686	
Total mileage of local freight,		28,030,425	
Total freight mileage, or tons carried one mile,		44,648,111	
Average ton haul for through freight,		189	
Average ton haul for local freight,		58.4	
Average ton haul for all freight,		78.6	
Average amount received for each ton haul,			\$1 02
Average rate per ton per mile, received for through freight,			00.45
Average rate per ton per mile, received for local freight,			01.80
Average rate per ton per mile, received for all freight,			01.30

#### *Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	61,980
Flour,	22,308
Provisions (beef, pork, lard, etc.),	3,864
Animals,	23,486

	Tons.
Other agricultural products, - - - - -	34,141
Lumber and forest products, - - - - -	131,185
Coal, - - - - -	42,109
Plaster, lime and cement, - - - - -	9,403
Salt, - - - - -	2,621
Petroleum, - - - - -	1,436
Railroad iron, iron and steel rails, - - - - -	409
Pig and bloom iron, - - - - -	162
Other iron and castings, - - - - -	6,532
Ores, - - - - -	41
Stone, brick and sand, - - - - -	28,662
Manufactures—articles shipped from point of production, - - - - -	21,479
Merchandise and other articles not enumerated above, - - - - -	93,445
Total forwarded, - - - - -	483,263

*Tonnage of Articles Transported—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	62,693	11.04
Flour, - - - - -	74,101	13.05
Provisions (beef, pork, lard, etc.), - - - - -	4,669	.82
Animals, - - - - -	23,486	4.13
Other agricultural products, - - - - -	36,530	6.43
Lumber and forest products, - - - - -	131,185	23.10
Coal, - - - - -	42,109	7.42
Plaster, lime and cement, - - - - -	9,472	1.67
Salt, - - - - -	2,621	.46
Petroleum, - - - - -	1,436	.25
Railroad iron, iron and steel rails, - - - - -	560	.10
Pig and bloom iron, - - - - -	1,847	.33
Other iron and castings, - - - - -	6,554	1.15
Ores, - - - - -	41	.01
Stone, brick and sand, - - - - -	28,662	5.05
Manufactures—articles shipped from point of production, - - - - -	21,479	3.78
Merchandise and other articles not enumerated above, - - - - -	120,430	21.21
Total tons carried, - - - - -	567,875	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company has exclusive right for passenger trains and pays \$50.00 per day for not exceeding 5,000 pounds per day and 60 cents per 100 pounds excess, carrying light freight, money, etc., and taking freight to and from depot.



*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

189 miles of single wire belonging to the Western Union Telegraph Company using the railroad company's poles. A second wire 46½ miles long of same telegraph company with poles runs between Detroit and Holly.

*Transportation Companies.***SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.**

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Wagner Palace Car Company, New York, City, N. Y., terms three cents per car per mile, amount paid \$3,998.82.

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Armour & Co., Refrigerator Line, Chicago, Illinois	\$6 34
Arms Palace Horse Car Co., Chicago, Illinois	5 97
American Refrigerator Transit Co., St. Louis, Missouri	10 89
Anglo American Provision Co., Chicago, Illinois	2 01
Atlanta Stone Coal & Lumber Line, Atlanta, Georgia	90
Brill, J. G., Philadelphia, Pennsylvania	5 89
Cutler & Savidge Lumber Co., Spring Lake, Michigan	48 63
Columbus & Hocking Coal & Iron Co., Columbus, Ohio	23 94
Chicago Refrigerator & Car Co., LaFayette, Indiana	89 81
Chicago Boston & Liverpool Co., St. Albans, Vermont	214 65
Cygnat Tank Line, Cleveland, Ohio	3 00
Doll, Jacob & Son, Kansas City, Missouri	50
Eagle Consolidated Tank Line, Cleveland, Ohio	12 56
Hammond Refrigerator Line, Chicago, Illinois	13 79
Kansas City Dressed Beef Line, Kansas City, Missouri	13
Lima Oil Co., Lima, Ohio	9 73
Michigan Ammonia Works, Detroit, Michigan	29 33
Michigan Salt Line, East Saginaw, Michigan	8 02
Morris & Co., Chicago, Illinois	122 11
Merchants' Despatch Transport. Co., New York City, N. Y.	692 52
National Car Co., St. Albans, Vermont	3,352 99
New York Despatch Refrigerator Line, New York City, N. Y.	753 05
Parker, D. W., Kalamazoo, Michigan	3 97
Peerless Tank Line, Cleveland, Ohio	4 06
Rend, W. P., Chicago, Illinois	1 18
Swift's Refrigerator Line, Chicago, Illinois	8 09

Street's Stable Car Line, Chicago, Illinois	\$14 15
Southern Iron Car Line, Atlanta, Georgia	2 83
St. Louis Refrigerator Line, St. Louis, Missouri	20 65
Sun Oil Line Co., Toledo, Ohio	31
Union Tank Line, New York City, New York	60 38
Union Iron Co., Detroit, Michigan	173 18
Total	\$5,695 56

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

- February 23, M. Cheney, farmer, Fenton. Trespasser.  
 September 24, Thomas Noonan, laborer, Transit Road, Detroit. Highway collision.  
 October 11, Edward Pettis, citizen, Holly. Intoxicated, highway collision.  
 December 13, J. Bernfeldt, citizen, Detroit. Highway collision.  
 Railroad company exonerated in all cases.

## INJURED.

- March 24, F. Todd, engineer, Pontiac. Examining engine; lack of caution.  
 May 28, H. S. Lyons, tramp, Pontiac. Fell from train; his own fault.  
 June 25, John Stochowiak, a boy, Detroit. Fell from train; his own fault.  
 July 22, James Doak, L. S. & M. S. Ry. employee, Detroit. Struck by engine; his own fault.  
 August 2, F. W. French, school teacher, Owosso. Trespasser; his own fault.  
 October 4, J. P. Heifner, tramp, Detroit. Trespasser; his own fault.  
 October 4, A. C. Heifner, tramp, Detroit. Trespasser; his own fault.  
 November 4, Anthony Plet, a boy, Detroit. Fell from train; his own fault.  
 December 23, W. Daniels, brakeman, Holly. Staking cars; purely accidental.  
 December 25, J. McMahon, brakeman, Detroit. Fell off car bumper; his own fault.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.
Collisions.....						
Coupling cars.....						
Deraillments.....						
Falling from trains.....					1	1
Frogs.....						
Getting on and off trains.....						3
Highway crossings.....			3			
Miscellaneous.....					2	
Overhead obstructions.....						2
Trespassers on trains.....			1			1
Trespassers on tracks.....						
Total.....			4		3	7

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	4
Number of persons injured during the year,	10
Number of casualties purely accidental,	2
Number resulting from lack of caution, carelessness, or misconduct,	12
Persons killed or injured while intoxicated,	1
Trespassers and tramps killed or injured,	7
Suicides,	None.

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....		2	2
Conductors.....			
Engineers.....		1	1
Firemen.....			
Laborers.....			
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....		3	3

STATE OF MICHIGAN, }  
COUNTY OF WAYNE, } ss.

W. J. Spicer, General Manager, and James H. Muir, Secretary and Treasurer, of the Detroit, Grand Haven & Milwaukee Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, W. J. SPICER, *General Manager.*  
JAS. H. MUIR, *Secretary and Treasurer.*

Subscribed and sworn to before me this 26th day of March, A. D. 1890.  
[L. S.] A. B. THOMAS,

*Notary Public, Wayne County.*

ANNUAL REPORT  
OF THE  
TOLEDO, SAGINAW & MUSKEGON RAILWAY COMPANY,

*For the Year Ending December 31, 1889.*

[Filed March 28, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, SIR JOSEPH HICKSON, Montreal, Quebec.  
*Vice President, and General Manager*, W. J. SPICER, Detroit, Mich.  
*Secretary and Treasurer*, JAMES H. MUIR, Detroit, Mich.  
*Superintendent*, A. B. ATWATER, Detroit, Mich.  
*Chief Engineer*, GEORGE MASSON, Detroit, Mich.  
*Traffic Manager*, JOHN W. LOUD, Detroit, Mich.  
*Counsel*, E. W. MEDDAUGH, Detroit, Mich.

DIRECTORS.

SIR JOSEPH HICKSON, Montreal, Quebec.  
 W. J. SPICER, Detroit, Mich.  
 A. B. MAYNARD, Detroit, Mich.  
 E. W. MEDDAUGH, Detroit, Mich.  
 C. JESSE CHURCH, Greenville, Mich.  
 HENRY HOWARD, Port Huron, Mich.  
 F. E. RANKIN, Detroit, Mich.  
 L. C. STANLEY, Detroit, Mich.  
 GEORGE MASSON, Detroit, Mich.  
 LYMAN E. MASON, Muskegon, Mich.  
 E. MIDDLETON, Greenville, Mich.

Terms expire second Wednesday in April, 1890, or when their successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When articles of association filed,—January 25, 1886.

Number of stockholders at date of last election, - - - - - 12

Number of stockholders in Michigan at same date, - - - - - 10

Amount of full paid stock held in Michigan at same date, - - - - - \$1,000 00

Date of annual meeting of stockholders,—Second Wednesday in April.

Fiscal year of company ends,—December 31.

General offices of the company are located at Detroit, Mich.

## GENERAL EXHIBIT.

	Debit.	Credit.
Total income,		\$91,870 24
Total expenses, including taxes,	\$89,893 96	
Net income,		\$1,976 28
Interest or funded debt,	\$78,000 00	
Less paid by Grand Trunk and Chicago & Grand Trunk R'ys under traffic agreement,	33,587 50	
	\$44,412 50	
Rentals of buildings, tracks, etc.,	779 42	
		45,191 92
Balance deficit for the year,	\$43,215 64	
Balance loss Dec. 31, 1888,	27,828 23	
Balance deficit forward to next year,		71,043 87
	\$71,043 87	\$71,043 87

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$1,600,000 00
Par value of shares,	\$100 00
Number of shares issued,	16,000
Amount paid in on common,	\$1,600,000 00
Total amount paid in, as per books of the company,	1,600,000 00
Paid in per mile of road owned by company,—96 miles,	\$16,666 67

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage bonds, dated July 2, 1888..	5%	July 1, 1918.....	New York...	\$1,560,000 00
Total funded debt.....				\$1,560,000 00

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For Construction.....		
For Equipment.....		
For Real Estate.....		
For Renewals.....		
For Miscellaneous.....		
For Current Balances.....		\$102,751 88
Total Unfunded Debt.....		\$102,751 88

## RECAPITULATION.

Total funded debt,	\$1,560,000 00
Total unfunded debt,	102,751 83
Total debt liabilities,	<u>\$1,662,751 83</u>
Amount of debt liabilities per mile of road,— 96 miles,	17,320 33
Total amount of stock and debt,	<u>\$3,262,751 83</u>
Stock and debt per mile of road,— 96 miles,	33,987 00

## GENERAL BALANCE SHEET.—Dr.

Construction and equipment account,	\$3,160,000 00
Cash items:	
Cash,	\$2,356 88
Due from agents,	5,319 41
	<u>7,676 29</u>
Other assets:	
Materials and supplies,	\$11,396 31
Debit balances from companies and individuals,	12,635 36
	<u>24,031 67</u>
Deficit,	71,043 87
Total,	<u>\$3,262,751 83</u>

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	\$1,600,000 00
Funded debt,	1,560,000 00
	<u>\$3,160,000 00</u>
Unfunded debt:	
Interest unpaid,	\$67,194 44
Vouchers and accounts,	35,557 39
	<u>102,751 83</u>
Total,	<u>\$3,262,751 83</u>

## COST OF ROAD AND EQUIPMENT.

*Purchased by Present Company.*

When purchased,—August 1, 1888.

Original cost to present company of road and equipment,	\$3,160,000 00
Total cost to date of report,	3,160,000 00
Average cost per mile of road not including sidings, —96 miles,	32,916 67
Proportion of cost for Michigan,	3,160,000 00

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares,	\$24,208 69	
Through fares,	3,844 09	
Total passenger fares,	\$28,052 78	
Express and baggage,	725 80	
Mails,	4,497 00	
Total passenger department earnings,		\$33,275 58
Proportion for Michigan,	\$33,275 58	
Per train mile,	39	
Per mile of road,	346 62	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic,	\$45,529 37	
Through traffic,	13,065 29	
Total traffic,	\$58,594 66	
Total freight department earnings,		\$58,594 66
Proportion for Michigan,	\$58,594 66	
Per train mile,	1 00	
Per mile of road,	610 36	
Total transportation earnings,		91,870 24
Transportation earnings per mile of road,	\$956 98	
Transportation earnings per train mile,	52	
Total earnings from operation of road,		91,870 24
Total earnings per mile of road,	\$956 98	
Total earnings per train mile,	52	
Proportion of taxable earnings for Michigan,		91,870 24
Total taxable earnings per mile of road in Michigan,	956 98	
Total income from all sources,		\$91,870 24
Proportion of income for Michigan,		91,870 24

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track,	\$19,274 37
Renewals of ties,	467 62
Repairs of bridges, including culverts and cattle guards,	6,349 87
Repairs of fences, road crossings and signs,	488 65
Repairs of buildings,	1,279 92
Total,	\$27,860 43

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives, - - - - -	\$6,031 99
Repairs of passenger cars, - - - - -	1,358 93
Repairs of freight cars, - - - - -	2,611 16
Total, - - - - -	<hr/> \$10,002 08

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	\$12,311 72
Water supply, - - - - -	665 59
Oil and waste, - - - - -	779 66
Locomotive service, - - - - -	12,359 26
Passenger train service, - - - - -	3,867 39
Passenger train supplies, - - - - -	350 00
Freight train service, - - - - -	3,643 14
Freight train supplies, - - - - -	600 00
Mileage of freight cars, - - - - -	488 00
Telegraph expenses (maintenance and operating), - - - - -	2,136 00
Damage and loss of freight and baggage, - - - - -	80 26
Damages to property and cattle, - - - - -	150 52
Personal injuries, - - - - -	320 00
Agents and station service, - - - - -	8,523 14
Station supplies, - - - - -	737 70
Total, - - - - -	<hr/> \$47,012 38

CLASS 4.—*General Expenses.*

Salaries of clerks in general offices, - - - - -	\$289 50
Insurance, - - - - -	367 07
Stationery and printing, - - - - -	1,519 87
Outside agencies and advertising, - - - - -	284 74
Contingencies, - - - - -	729 58
Taxes, - - - - -	1,828 31
Total, - - - - -	<hr/> \$5,019 07

## RECAPITULATION OF EXPENSES.

	Per cent of Expenses.	
Maintenance of way and buildings, - - - - -	30.99	\$27,860 43
Maintenance of motive power and cars, - - - - -	11.13	10,002 08
Conducting transportation, - - - - -	52.30	47,012 38
General expenses, including taxes, - - - - -	5.58	5,019 07
Total operating expenses and taxes, - - - - -	100.00	<hr/> \$89,893 96



Operating expenses and taxes per mile of road,	\$936 40	
Operating expenses and taxes per train mile run, for trains earning revenue,—175,030 miles,		51
Proportion of operating expenses and taxes for Michigan:		
Main line,	89,893 96	
Total proportion of expenses for Michigan,		\$89,893 96
Percentage of expenses to earnings,	97.85%	
Net earnings per mile of road,	\$20 58	
Net earnings per train mile,	01	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Ashley, Michigan, to Muskegon, Michigan, August 1, 1888.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Ashley to Muskegon,	96.00	
Total length completed,		96.00
Total length of road belonging to this company,		96.00
Total length of road belonging to this company in Michigan,	96.00	
Aggregate length in Michigan, of sidings, spurs, and other tracks not above enumerated,	8.09	
Aggregate length of tracks in Michigan belong- ing to this company, computed as single track,		104.09
Gauge of track, 4 feet 8½ inches.		
Total miles operated by the company,	Total Miles. 96.00	In Michigan. 96.00

## Number of Bridges and Trestles in Michigan.

Wooden bridges, number of	4;	Aggregate length, feet,	375
Wooden trestles, number of	70;	Aggregate length, feet,	6,837
Total,	74;		7,212

## Crossings—Railroad and Highway.

What railroads cross your road at grade in this State, and at what locality?

Detroit, Lansing & Northern Railroad at Sheridan.  
Detroit, Lansing & Northern Railroad at Greenville.  
Grand Rapids & Indiana Railroad at Cedar Springs.

Chicago & West Michigan Railway at Sparta.

Chicago & West Michigan Railway at Fruitport Junction.

Chicago & West Michigan Railway at Muskegon.

What railroads cross your road either over or under your grade in this State, and where? None.

At what crossings are interlocking and derailing switches in operation?

Detroit, Lansing & Northern railroad crossing at Sheridan.

Detroit, Lansing & Northern railroad crossing at Greenville.

Grand Rapids & Indiana railroad crossing at Cedar Springs.

Chicago & West Michigan railway crossing at Sparta.

Chicago & West Michigan railway crossing at Fruitport Junction.

Chicago & West Michigan railway crossing at Muskegon.

What pattern or patterns have you adopted? Wharton's Railroad Switch Company's design and workmanship.

Number of crossings of highways at grade in this State, 125

Number of crossings of highways at grade in this State at which there are gates or flagmen, None.

Number of crossings at which there are electric or automatic signals, None.

Number of crossings of highways over or under railroad: Over,—1. Under,—2. 3

Number of highway bridges 18 feet above track, 1

Have safety guards been erected at over-head obstructions, Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883, Yes.

How are they treated? With plank blocking.

#### Stations.

Number of stations on whole line, - - - - - 25

Same in Michigan, - - - - - 25

#### Employés.

Number persons regularly employed on all roads operated by company, including officials, - - - - - 101

Same in Michigan, - - - - - 101

Classify your employés as per following list:

	NUMBER.
Baggagemen, - - - - -	2
Brakemen, - - - - -	6
Conductors, - - - - -	4
Engineers, - - - - -	5
Firemen, - - - - -	6
Laborers, - - - - -	42
Shopmen, - - - - -	2
Yardmen, - - - - -	1
Others, - - - - -	33

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - - 182.38

Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed:

Muskegon county, - - - - -	5.50
Kent county, - - - - -	.75
Gratiot county, - - - - -	1.75
Montcalm county, - - - - -	1.61
Total miles required, - - - - -	9.61

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	10
Average length of sections (miles), - - - - -	9.6
Average number of men in each section gang, - - - - -	4.5

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	5	\$25,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	1	3,000 00
Total, - - - - -	6	\$28,000 00
Number of passenger cars—8 wheel, including official cars, - - - - -	2	8,000 00
Number of express and baggage cars, - - - - -	4	10,000 00
Number of box freight cars, - - - - -	80	34,000 00
Number of platform cars, - - - - -	52	15,600 00
Number of conductors' way cars, - - - - -	2	3,000 00
Total, - - - - -	140	\$98,600 00

Number of locomotives equipped with power brakes, - - - - - 2

Number of passenger-train cars equipped with power brakes, - - - - - 6

Number of freight cars equipped with power brakes, None.

What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse. Two locomotives and eight cars.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? McCree & Aikman's, but withdrawing them.

How are your passenger cars heated? Baker heater,—hot water.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year.	-	-	103,637
Miles run by freight trains during the year,	-	-	694
Miles run by mixed trains,	-	-	70,699
Total mileage of trains earning revenue,	-	-	175,030

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried,	1,931		
Number of local passengers carried,	52,722		
Total number of passengers carried,	54,653		

Total passenger mileage, or passengers carried one mile,	1,072,601		
Average distance traveled by each passenger,	19.6		
Average amount received from each passenger,			\$0 51.00
Average rate of fare per mile for through passengers,			02.07
Average rate of fare per mile for local passengers,			02.73
Average rate of fare per mile for all passengers,			02.62

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	16,295		
Number of tons of local freight carried,	61,857		

Total tons of freight carried,	78,152		
Total mileage of through freight.	-	-	1,564,320
Total mileage of local freight,	-	-	2,049,790

Total freight mileage, or tons carried one mile,	3,614,110		
Average ton haul for through freight,	-	-	96
Average ton haul for local freight,	-	-	33.1
Average ton haul for all freight,	-	-	46.2
Average amount received for each ton haul,	-	-	75.00
Average rate per ton per mile received for through freight,	-	-	00.84
Average rate per ton per mile, received for local freight,	-	-	02.22
Average rate per ton per mile, received for all freight,	-	-	01.62

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	8,562
Flour,	2,926
Provisions (beef, pork, lard, etc.),	243
Animals,	2,404
Other agricultural products,	10,231
Lumber and forest products,	37,115
Coal,	1,987

	Tons.
Plaster, lime and cement,	462
Salt,	229
Petroleum,	71
Pig and bloom iron,	507
Other iron and castings,	273
Ores,	47
Stone, brick and sand,	1,397
Manufactures,—articles shipped from point of production,	2,101
Merchandise and other articles not enumerated above,	9,597
<b>Total forwarded,</b>	<b>78,152</b>

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain,	8,562	10.96
Flour,	2,926	3.74
Provisions (beef, pork, lard, etc.),	243	.31
Animals,	2,404	3.08
Other agricultural products,	10,231	13.09
Lumber and forest products,	37,115	47.49
Coal,	1,987	2.54
Plaster, lime and cement,	462	.59
Salt,	229	.29
Petroleum,	71	.09
Pig and bloom iron,	507	.65
Other iron and castings,	273	.35
Ores,	47	.06
Stone, brick and sand,	1,397	1.79
Manufactures,—articles shipped from point of production,	2,101	2.69
Merchandise and other articles not enumerated above,	9,597	12.28
<b>Total tons carried,</b>	<b>78,152</b>	<b>100.00</b>

**ADDITIONAL QUESTIONS.**

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company has exclusive right on passenger trains, carrying light freight, money, etc., taking freight to and from depots at the following rates: On through merchandise first-class rates, on local merchandise  $1\frac{1}{2}$  first-class rates, on perishable goods  $1\frac{1}{10}$  first-class rates.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

96 miles, owned by Western Union Telegraph Company.

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Chicago, Boston & Liverpool Co., St. Albans, Vermont,	\$8 00
Chicago Refrigerator Car Co., LaFayette, Indiana,	10 37
Merchants' Despatch Transportation Co., New York City, N. Y.,	52 28
New York Despatch Line, New York City, N. Y.,	16 14
National Car Co., St. Albans, Vermont,	185 98
Parker, D. W., Kalamazoo, Michigan,	14
Total,	\$272 91

STATE OF MICHIGAN, }  
COUNTY OF WAYNE, } ss.

W. J. Spicer, Vice President and General Manager, and James H. Muir, Secretary and Treasurer, of the Toledo, Saginaw & Muskegon Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

W. J. SPICER.  
JAS. H. MUIR.

Subscribed and sworn to before me this 26th day of March, A. D. 1890.

A. B. THOMAS, *Notary Public.*

ANNUAL REPORT  
OF THE  
WABASH RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 1, 1890.]

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OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, O. D. ASHLEY, New York,  
*Vice Presidents*, EDGAR T. WELLES, New York.  
JAMES F. HOW, St. Louis, Mo.  
*Secretary*, J. C. OTTESON, New York.  
*Auditor*, D. B. HOWARD, St. Louis, Mo.  
*Treasurer*, F. L. O'LEARY, St. Louis, Mo.  
*General Manager*, CHAS. M. HAYS, St. Louis, Mo.  
*General Superintendent*, H. L. MAGEE, St. Louis, Mo.  
*Division Superintendents*, E. A. GOULD, Peru, Ind.  
J. S. GOODRICH, Chicago, Ills.  
F. H. MCGINGAN, Kansas City, Mo.  
*Chief Engineer*, W. S. LINCOLN, St. Louis, Mo.  
*Superintendent of Telegraph*, G. C. KINSMAN, Decatur, Ills.  
*General Passenger Agent*, F. CHANDLER, St. Louis, Mo.  
*General Freight Agent*, S. B. KNIGHT, St. Louis, Mo.  
*Attorney*, W. H. BLODGETT, St. Louis, Mo.

DIRECTORS.

JAMES F. JOY, Detroit, Mich.  
THOS. H. HUBBARD, New York.  
EDGAR F. WELLES, New York.  
JOHN T. TERRY, New York.  
GEORGE J. GOULD, New York.  
JAMES F. HOW, St. Louis, Mo.  
CHAS. M. HAYS, St. Louis, Mo.  
HENRY K. MCHARG, New York.  
RUSSELL SAGE, New York.  
SIDNEY DILLON, New York.  
S. C. REYNOLDS, Toledo, Ohio.  
CYRUS J. LAWRENCE, New York.  
O. D. ASHLEY, New York.

Terms expire September 9, 1890.

## STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—July 31, 1889.

Number of stockholders at date of last election, - - - - Not reported.

Number of stockholders in Michigan at same date, - - - - Not reported.

Amount of full paid stock held in Michigan at same date, - - - - Not reported.

Date of annual meeting of stockholders,—Second Tuesday in September each year.

Fiscal year of company ends June 30.

General offices of the company are located at St. Louis, Mo.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, entire system, - - -		\$10,094,875 48
Total expenses, including taxes, - - -	\$7,330,539 64	
Net income, - - -		2,764,335 84
Interest on funded debt, including leased lines, - - -	\$2,138,393 32	
Rentals of buildings, tracks, etc., - - -	297,414 83	
Sundry charges, - - -	634,256 32	
Balance for the year, - - -	\$305,728 63	3,070,064 47
Balance (profit and loss) last year, - - -		594,202 65
Balance forward to next year, - - -	288,474 02	
	\$594,202 65	\$594,202 65

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$52,000,000 00
Par value of shares, - - -	\$100 00
Number of shares issued, - - -	520,000
Amount common, - - -	\$24,000,000 00
Amount preferred, - - -	28,000,000 00
Total amount paid in as per books of the company, -	\$52,000,000 00

Paid in per mile of road owned by company,  
—1,678.50 miles, - - - - \$30,980 00



## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
1st mortgage bonds, North Missouri R. R.	7%	1895.....	New York.....	\$6,000,000
Real estate and railway mortgage bonds	7%	1895.....	New York.....	3,000,000
1st mortgage bonds, St. Charles bridge	6%	1908.....	New York.....	1,000,000
2d mortgage bonds, St. Charles bridge	7%	1908.....	New York.....	388,500
1st mortgage bonds, Ottumwa division	7%	1897.....	New York.....	322,000
1st mortgage bonds, Boone Co. & Boonville R. R.	7%	1908.....	New York.....	100,000
1st mortgage bonds, Brunswick & Chill. R. R.	6%	1908.....	New York.....	304,500
1st mortgage bonds, St. L., C., B. & O. R. R.	6%	1908.....	New York.....	626,000
1st mortgage bonds, Wabash R. R. Co.	5%	1889.....	New York.....	22,250,000
2d mortgage bonds, Wabash R. R. Co.	5%	1889.....	New York.....	14,000,000
*Debenture bonds	6%	1889.....	New York.....	30,000,000
Total funded debt.....				\$78,000,000

\* If earned.

## UNFUNDED DEBT.

Unfunded debt, - - - - - None.

## RECAPITULATION.

Total funded debt,	\$78,000,000 00
Total debt liabilities,	\$78,000,000 00
Amount of debt liabilities per mile of road,—1,678.5 miles,	46,470 00
<input type="checkbox"/> Total amount of stock and debt, entire system,	\$130,000,000 00
Stock and debt per mile of road,—1,678.5 miles,	77,450 00

## GENERAL BALANCE SHEET.—DR.

Cost of road, equipment and appurtenances,	\$129,970,000 00
Cash Items:	
Cash,	\$1,982,940 86
Due from agents,	274,425 32
	2,257,366 18
Other assets:	
Materials and supplies,	\$405,392 75
Debit balances from companies and individuals,	693,206 30
	1,098,599 05
Total,	\$133,325,965 23

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	-	-	-	-	-	-	-	\$52,000,000	00
Funded debt,	-	-	-	-	-	-	-	78,000,000	00
Unfunded debt:									
Interest unpaid,	-	-	-	-	-	-	\$994,985	24	
Vouchers and accounts,	-	-	-	-	-	-	1,455,341	43	
Other liabilities,	-	-	-	-	-	-	403,915	31	
								2,854,241	98
Purchasing committee,	-	-	-	-	-	-	-	183,249	23
Profit and loss or income accounts,	-	-	-	-	-	-	-	288,474	02
Total,	-	-	-	-	-	-	-	\$133,325,965	23

## COST OF ROAD AND EQUIPMENT.

*Purchased by Present Company.*

When purchased,— July 1, 1889.

Original cost to present company, of road and equipment,	\$129,970,000	00
Total cost to date of report,	129,970,000	00
Average cost per mile of road, not including sidings,—		
1,678.5 miles,	77,450	00
Proportion of cost for Michigan,	6,126,295	00

## ANALYSIS OF EARNINGS.

*Leased or Proprietary Roads.*

## PASSENGER EARNINGS.

Detroit division, composed of the Detroit, Butler &amp; St. Louis Railroad, Eel River Railroad, Chicago &amp; Atlantic Track:

Total passenger fares,	-	-	-	-	\$433,815	16
Express and baggage,	-	-	-	-	9,673	37
Mails,	-	-	-	-	18,141	94
Other sources,	-	-	-	-	7,466	31
Total passenger department earnings,	-	-	-	-	\$469,096	78
Proportion for Michigan,	-	-	-	-	\$110,663	75
Per train mile,	-	-	-	-	58.62	
Per mile of road,	-	-	-	-	1,399	03

## FREIGHT EARNINGS.

*Leased or Proprietary Roads.*

Detroit division, composed of the Detroit, Butler &amp; St. Louis Railroad, Eel River Railroad, Chicago &amp; Atlantic Track:

Total traffic,	-	-	-	-	\$1,322,616	74
Other sources,	-	-	-	-	16,270	35
Total freight department earnings,	-	-	-	-	\$1,338,887	09

Proportion for Michigan, - - - - -	\$315,854 37	
Per train mile, - - - - -	1 27.6	
Per mile of road, - - - - -	3,993 10	
<hr/>		
Total transportation earnings, entire system, - - - - -	\$9,934,431 13	
Transportation earnings per mile of road, - - - - -	\$6,778 86	
Transportation earnings per train mile, - - - - -	1 20.5	
From other sources, - - - - -	160,444 35	
<hr/>		
Total, - - - - -	160,444 35	
<hr/>		
Total earnings from operation of road, - - - - -	\$10,094,875 48	
<hr/>		
Total earnings per mile of road, ---1,465.50		
miles, - - - - -	\$895 17	
Total earnings per train mile, - - - - -	1 20.5	
Proportion of taxable earnings for Michigan, - - - - -	426,518 12	
Total taxable earnings per mile of road in Michigan, - - - - -	4,571 98	
<hr/>		
Total income from all sources, - - - - -	\$10,094,875 48	

## ANALYSIS OF EXPENSES.

## CLASS 1.--Maintenance of Way and Buildings.

Repairs of road way and track, - - - - -	\$803,789 92
Renewals of rails, - - - - -	111,944 80
Renewals of ties, - - - - -	240,346 01
Repairs of bridges, including culverts and cattle guards, - - - - -	142,627 42
Repairs of fences, road crossings, and signs, - - - - -	47,426 92
Repairs of buildings, - - - - -	193,684 00
<hr/>	
Total, - - - - -	\$1,539,819 07

## CLASS 2. - Maintenance of Motive Power and Cars.

Repairs of locomotives, - - - - -	\$493,822 26
Repairs of passenger cars, - - - - -	221,496 10
Repairs of freight cars, - - - - -	520,363 60
<hr/>	
Total, - - - - -	\$1,235,681 96

## CLASS 3.-Conducting Transportation.

Fuel for locomotives, - - - - -	\$524,417 96
Water supply, - - - - -	58,013 45
Oil and waste, - - - - -	65,601 78
Locomotive service, - - - - -	648,900 06
Passenger train service, - - - - -	164,443 34
Passenger train supplies, - - - - -	21,706 46
Mileage of passenger cars, - - - - -	61,334 13
Freight train service, - - - - -	341,063 17
Freight train supplies, - - - - -	7,882 71
Mileage of freight cars, - - - - -	138,680 32

Telegraph expenses (maintenance and operating),	\$163,399 95
Damage and loss of freight and baggage,	11,937 64
Damages to property and cattle,	31,375 37
Personal injuries,	24,793 57
Agents and station service,	1,110,401 25
Station supplies,	29,485 69
Total,	\$3,403,436 85

## CLASS 4.—General Expenses.

Salaries of the general officers of the company,	\$193,335 06
Salaries of clerks in general offices,	37,844 40
Law expenses,	29,261 27
Insurance,	26,486 25
Stationery and printing,	64,271 47
Outside agencies and advertising,	239,587 72
Contingencies,	297,161 38
Taxes,	263,654 21
Total,	\$1,151,601 76

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings,	21.01	\$1,539,819 07
Maintenance of motive power and cars,	16.85	1,235,681 96
Conducting transportation,	46.43	3,403,436 85
General expenses, including taxes,	15.71	1,151,601 76
Total operating expenses and taxes,	100.00	\$7,330,539 64

Operating expenses and taxes per mile of road,	\$5,002 07
Operating expenses and taxes per train mile run,	
for trains earning revenue,—8,239,237 miles,	88.97
Proportion of operating expenses and taxes for Michigan:	

## Leased or Proprietary Roads.

## DETROIT DIVISION.

Composed of Detroit, Butler & St. Louis Railroad, Eel River Railroad, Chicago & Atlantic Track, $\frac{333}{333}$ of \$1,458,049.86,	\$343,965 83
--	--------------

Percentage of expenses to earnings,—73.78%.	
Net earnings per mile of road,	1,776 79
Net earnings per train mile,	31.53

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Detroit to Butler, 1881.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Detroit to Ohio State line, -	79.10	
In Ohio, from State line to State line, -	28.50	
In Indiana, from State line to Logansport, -	98.90	
From Laketon Junction to Chicago, -	122.80	
From Logansport to Clymers, -	6.00	

Total length completed, - - - - - 335.30

Total length of road belonging this company in Michigan, - - - - - 75.20

Aggregate length in Michigan, of sidings, spurs, and other tracks not above enumerated, - - - - - 30.79

Aggregate length of tracks in Michigan belonging to this company, computed as single track, - - - - - 105.99

Gauge of track, 4 feet, 8½ inches.

*Proprietary or Leased Roads Operated by this Company.*

Name, description, and length of each:	Total Miles. In Michigan.
Detroit union depot track, - - - - -	3.90
Total miles operated by this company constituting Detroit division, - - - - -	335.30 79.10

*Number of Bridges and Trestles in Michigan.*

Combination bridges, number of 2; Aggregate length, feet, -	359
Wooden trestles, number of 89; Aggregate length, feet, -	8,008
Total, - - - - - 91; - - - - -	8,367

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State and at what locality?

Michigan Central Railroad at Delrey.

L. S. & M. S. Railroad at Delrey.

F. & P. M. Railroad at Romulus.

T., A. A. & N. M. Railroad at Milan.

C., J. & M. Railroad at Britton.

L. S. & M. S. Railroad at Raisin Center.

L. S. & M. S. Railroad at Adrian.

What railroads cross your road either over or under your grade in this State, and where?

Over,—None.

Under,—None.

At what crossings are interlocking and derailing switches in operation?  
None.

Number of crossings of highways at grade in this State, -	116
Number of crossings of highways at grade in this State at which there are gates or flagmen, -	6
Number of crossings at which there are electric or automatic signals, -	None.
Number of crossings of highways over or under railroad, -	None.
Number of highway bridges 18 feet above track, -	None.
Number of highway bridges less than 18 feet above track, -	None.
Have safety guards been erected at over-head obstructions, -	Yes.
Are your frogs and guard rails blocked as required by Act 174, Session Laws 1883? -	Yes.
How are they treated? Blocked with plank.	

*Stations.*

Number of stations on whole line, - - - - -	125
Same in Michigan, - - - - -	17

*Employés.*

Number persons regularly employed on all roads operated by company, including officials, - - - - -	—
Same in Michigan, - - - - -	243
Classify your employés as per following list:	

	Number.
Baggagemen, - - - - -	3
Brakemen, - - - - -	35
Conductors, - - - - -	18
Engineers, - - - - -	—
Firemen, - - - - -	—
Laborers, - - - - -	104
Shopmen, - - - - -	—
Yardmen, - - - - -	29
Others, - - - - -	54

*Fencing in Michigan.*

How many miles of fencing have you? - - - - -	153.2
Give the number of miles required to complete fence both sides of your track in Michigan and the counties in which needed:	
Wayne county, - - - - -	1.5

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	12
Average length of sections (miles), - - - - -	6.66
Average number of men in each section gang, - - - - -	5
Number of new ties put in track in Michigan, - - - - -	30,906
Average number of new ties per mile of road, - - - - -	388.26
New rails put in track:	
Steel (tons 258.92) miles, 2.57.	
Total miles of track laid with new rails, - - - - -	2.57

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender,	367	\$1,101,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	37	111,000 00
Total, - - - - -	404	\$1,212,000 00
Number of passenger cars—12 wheel, including official cars, - - - - -	83	340,150 00
Number of passenger cars—8-wheel, including official cars, - - - - -	84	185,100 00
Number of express and baggage cars, - - - - -	109	215,600 00
Number of box freight cars, - - - - -	8,352	2,387,055 00.
Number of stock cars, - - - - -	1,612	460,410 00
Number of platform cars, - - - - -	3,329	711,130 00
Number of conductors' way cars, - - - - -	204	117,300 00
Other cars, - - - - -	206	67,630 00
Total, - - - - -	13,979	\$5,696,375 00
Number of locomotives equipped with power brakes, - - - - -	276	
Number of passenger-train cars equipped with power brakes, - - - - -	407	
Number of freight cars equipped with power brakes, - - - - -		
What patterns of power breaks have you in use, and number of locomotives and cars with each? Westinghouse Air & Train Brake and American Steam Driver Brake.		
Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? 90 cars equipped.		
What pattern or patterns have you adopted for use? M. C. B. Association.		
How are your passenger cars heated? Baker heater.		

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

## ENTIRE SYSTEM.

Miles run by passenger trains during the year, - - -	3,306,876
Miles run by freight trains during the year, - - -	4,932,361
Total mileage of trains earning revenue, - - -	8,239,237

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Total number of passengers carried, -	2,174,065		
Total passenger mileage, or passengers carried one mile, -		109,667,067	
Average distance traveled by each passenger, -		50.1	
Average amount received from each passenger, -			\$1 11.03
Average rate of fare per mile for all passengers, -			02.20

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Total tons of freight carried, -	4,754,790		
Total freight mileage, or tons carried one mile, -		932,181,857	
Average ton haul for all freight, -		196.10	
Average amount received for each ton haul, -			\$1 42.98
Average rate per ton per mile, received for all freight, -			00.72

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, -	779,547	21.68
Flour, -	91,990	02.56
Provisions (beef, pork, lard, etc.), -	59,334	01.65
Animals, -	211,929	05.89
Other agricultural products, -	132,835	03.69
Lumber and forest products, -	303,124	08.43
Coal, -	967,238	26.90
Plaster, lime and cement, -	50,604	01.41
Salt, -	116,494	03.24
Petroleum, -	32,308	00.90
Railroad iron, iron and steel rails, -	15,953	00.44
Pig and bloom iron, -	23,844	00.66
Other iron and castings, -	5,735	00.16
Ores, -	3,539	00.10
Stone, brick and sand, -	69,623	01.94
Manufactures,—articles shipped from point of production, -	41,797	01.16
Merchandise and other articles not enumerated above, -	690,148	19.19
Total tons carried, -	3,596,042	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies? Pacific Express Company.



*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
206.5 miles on Detroit Division. Western Union Telegraph Co.,

*Transportation Companies.*

## SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Wagner Palace Car Co., New York,	\$19,683 12
Woodruff Sleeping & Parlor Coach Co., Philadelphia,	371 18
Pullman Palace Car Co., Chicago, February to June,	1,458 34
Railroad Co., pays Wagner Palace Car Co., three cents per mile run and Woodruff two cents. Railroad Co., collects all fares. Sleeping Car Co., collects all Sleeping Car fares.	

*Fast Freight Lines.*

To what fast freight lines or other-transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Blue Line,	\$4,548 04
Canada Southern Line,	2,230 79
Empire Line,	307 32
Erie Despatch,	640 37
Great Eastern Line,	1,508 04
Merchants' Despatch.	4,348 36
Midland Line,	349 52
National Despatch,	5,049 52
Nickle Plate Line,	16 34
Pittsburg & Toledo Despatch,	340 18
Red Line Transit Co.,	3,878 57
Union Line,	1,613 54
White Line,	576 51
Total,	\$25,407 10

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

August 17, Walter W. Morse, freight conductor, Seneca. While making "flying switch" was knocked from top of car and run over; his own carelessness.

November 28, Fred Dasher, citizen, Hand. Struck by an engine, on crossing and killed; gross carelessness on his part.

## INJURED.

January 31, T. Gerard, section laborer, Delrey. Struck on left arm by tie, he was unloading from car; carelessness on his part.

February 9, Charles Ball, brakeman, Milan. Left arm caught between deadwoods while coupling cars; want of caution.

August 21, John Milan, switchman, Detroit. Coupling engine to car, had right leg caught; want of caution.

September 2, James McCracken, switchman, Delrey. Brake wheel broke while setting brake, fell from top of car; accidental.

August 31, George Nelson, switchman, Detroit. Left arm caught between deadwoods while coupling cars; purely accidental.

September 12, George Bittner, switchman, Detroit. Left hand caught while coupling cars; want of care and caution on his part.

September 21, Lizzie Shawley, passenger, Munson. Attempted to board moving train and fell; careless.

November 19, F. Brauer, switchman Delrey. Caught and squeezed between cars while coupling same; accidental.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....					5	
Derailments.....						
Falling from trains.....		1			1	
Frogs.....						
Getting on and off trains.....				1		
Highway crossings.....			1			
Miscellaneous.....					1	
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on tracks.....						
Total.....		1	1	1	7	

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	2
Number of persons injured during the year,	8
Number of casualties purely accidental,	4
Number resulting from lack of caution, carelessness, or misconduct,	6
Persons killed or injured while intoxicated,	—
Trespassers and tramps killed or injured,	—
Suicides (attempted),	—

## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

Employees.	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....		1	1
Conductors.....	1		1
Engineers.....			
Firemen.....			
Laborers.....		1	1
Shopmen.....			
Yardmen.....		5	5
Not classified above.....			
Total.....	1	7	8

STATE OF MISSOURI, }  
 CITY OF ST. LOUIS, } ss.

James F. How, Vice President of the Wabash Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

Signed,

[ L. S. OF R. R. ]

JAMES F. HOW, *Vice President.*

Subscribed and sworn to before me this 28th day of March, A. D. 1890.

B. C. WINSTON, *Notary Public.*

ANNUAL REPORT  
OF THE  
PONTIAC, OXFORD & NORTHERN RAILROAD COMPANY, .

*For the Year Ending December 31, 1889.*

[Filed March 23, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, GEO. W. DEBEVOISE, New York City.  
*Vice President and Treasurer*, HUGH PORTER, New York City.  
*Secretary*, WM. H. MURPHY, New York City.  
*Auditor*, W. C. SANFORD, Pontiac, Mich.  
*Asst. Secretary and Asst. Treasurer*, FRANK H. CARROLL, Pontiac, Mich.  
*General Superintendent*, JAMES HOUSTON, Pontiac, Mich.  
*Chief Engineer*, GEO. A. NETTLETON, Pontiac, Mich.  
*General Passenger and Freight Agent*, JAMES HOUSTON, Pontiac, Mich.  
*Attorney*, A. C. BALDWIN, Pontiac, Mich.

DIRECTORS.

GEO. W. DEBEVOISE, New York City.  
 CHARLES H. STONE, New York City.  
 HUGH PORTER, New York City.  
 WM. H. MURPHY, New York City.  
 A. C. BALDWIN, Pontiac, Mich.  
 JAMES HOUSTON, Pontiac, Mich.  
 FRANK H. CARROLL, Pontiac, Mich.

Terms expire September 24, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—September 24, 1889.  
 Number of stockholders at date of last election, - - - - - 8  
 Number of stockholders in Michigan at same date, - - - - - 3  
 Amount of full paid stock held in Michigan at same date, - - - - - \$3,000  
 Date of annual meeting of stockholders,—First Wednesday after the third Monday in  
 September.

Fiscal year of company ends,—December 31.

General offices of the company are located at Pontiac, Mich.

## REMARKS.

The Pontiac, Oxford & Port Austin Railroad was operated by the Farmers' Loan & Trust Company, of New York, trustee for the bond holders, from February 23, 1888, to September 19, 1889, and on that date was transferred, as per conditions of sale made June 5, 1889, to Hugh Porter and others, purchasing committee, representing the bond holders. On September 24, 1889, the railroad, and all property belonging thereto, was transferred by Hugh Porter and others to the Pontiac, Oxford & Northern Railroad Company. This report includes the operations of both companies during the year 1889.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income,		\$102,068 27
Total expenses, including taxes,	\$91,831 66	
Net income,		\$10,236 61
Balance for the year,		\$10,236 61
Balance forward to next year,	\$10,236 61	
	\$10,236 61	\$10,236 61

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$1,000,000 00
Par value of shares,	\$100
No. of shares issued,	10,000
Amount paid in on common,	\$1,000,000 00
Total amount paid in, as per books of the company,	\$1,000,000 00
Paid in per mile of road owned by company,	
—100 miles,	\$10,000 00

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt,	None.
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## UNFUNDED DEBT.

For what Incurred.	Is the Same to be Funded, or How Liquidated.	Amount.
For construction		
For equipment		
For real estate		
For renewals		
For miscellaneous		
For current balances		\$9,381 27
Total unfunded debt		\$9,381 27

## RECAPITULATION.

Total unfunded debt,	\$9,381 27
Total debt liabilities,	\$9,381 27
Amount of debt liabilities per mile of road,—100 miles,	93 81
Total amount of stock and debt,	\$1,009,381 27
Total stock and debt per mile of road,—100 miles,	10,093 81

## GENERAL BALANCE SHEET.—Dr.

Construction account,	\$883,683 05
Equipment account,	110,500 00
Cash items:	
Cash,	\$14,473 11
Bills receivable,	1,248 85
Due from agents,	622 79
	\$16,344 75
Other assets:	
Materials and supplies,	\$7,330 49
Debit balances from companies and individuals,	1,759 59
	\$9,090 08
Total,	\$1,019,617 88

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	\$1,000,000 00
Unfunded debt:	
Vouchers and accounts,	9,381 27
Profit and loss or income accounts,	10,236 61
Total,	\$1,019,617 88

## COST OF ROAD AND EQUIPMENT.

*Purchased by present company.*

When purchased. September 24, 1889.

Original cost to present company, of road and equipment, \$1,000,000 00

Total cost to date of report, \$1,000,000 00

Average cost per mile of road, not including sidings—

100 miles, 10,000 00

Proportion of cost for Michigan, 1,000,000 00

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Right of way,	\$150 50
New buildings,	920 32

Total,	\$1,070 82
--------	------------

Total charges to property account as above, \$1,070 82

Net addition to property account, 1,070 82

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

## Main line:

Local fares, \$36,492 70

Through fares, 1,022 36

Total passenger fares, \$37,515 06

Express and baggage, 2,480 48

Mails, 5,780 12

Total passenger department earnings, \$45,775 66

Proportion for Michigan, \$45,775 66

Per train mile, 50

Per mile of road, 457 76

## FREIGHT EARNINGS.

## Main line:

Local traffic, \$52,583 61

Through traffic, 3,641 00

Total traffic, \$56,224 61

Total freight department earnings, \$56,224 61

Proportion for Michigan,	\$56,224 61	
Per train mile,	1 14	
Per mile of road,	562 25	
Total transportation earnings,		\$102,000 27
Transportation earnings per mile of road,	\$1,020 00	
Transportation earnings per train mile,	72.19	
From other sources,		68 00
Total earnings from operation of road,		\$102,068 27
Total earnings per mile of road,	\$1,020 68	
Total earnings per train mile,	72.24	
Proportion of taxable earnings for Michigan,		\$102,068 27
Total taxable earnings per mile of road in Michigan,	1,020 68	
Total income from all sources,		\$102,068 27
Proportion of income for Michigan,		102,068 27

## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track,	\$21,213 43
Renewals of rails,	16 04
Renewal of ties,	12,262 98
Repairs of bridges, including culverts and cattle guards,	1,059 55
Repairs of fences, road crossings, and signs,	1,578 82
Repairs of buildings,	1,825 23
Total,	\$37,956 05

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives,	\$5,095 74
Repairs of passenger cars,	2,889 94
Repairs of freight cars,	2,043 83
Total,	\$10,029 51

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives,	\$7,936 27
Water supply,	816 78
Oil and waste,	628 79
Locomotive service,	6,015 28
Passenger train service,	2,650 12
Passenger train supplies,	210 24
Freight train service,	3,066 53



Freight train supplies, - - - - -	\$95 66
Mileage of freight cars, - - - - -	324 33
Telegraph expenses (maintenance and operating), - - - - -	2,127 36
Damage and loss of freight and baggage, - - - - -	64 05
Damage to property and cattle, - - - - -	545 56
Personal injuries, - - - - -	17 50
Agents and station service, - - - - -	5,633 81
Station supplies, - - - - -	535 27
<b>Total, - - - - -</b>	<b>\$30,667 55</b>

## CLASS 4.—General Expenses.

Salaries of the general officers of the company, - - - - -	\$5,775 00
Salaries of clerks in general offices, - - - - -	1,680 20
Law expenses, - - - - -	1,590 13
Stationery and printing, - - - - -	1,134 77
Outside agencies and advertising, - - - - -	121 75
Contingencies, - - - - -	835 85
Taxes, - - - - -	2,040 85
<b>Total, - - - - -</b>	<b>\$13,178 55</b>

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - - - -	41.33	\$37,956 05
Maintenance of motive power and cars, - - - - -	10.92	10,029 51
Conducting transportation, - - - - -	33.40	30,667 55
General expenses, including taxes, - - - - -	14.35	13,178 55
<b>Total operating expenses, and taxes, - - - - -</b>	<b>100.00</b>	<b>\$91,831 66</b>
Operating expenses and taxes per mile of road, - - - - -	\$918 32	
Operating expenses and taxes per train mile run, for trains earning revenue,—141,285 miles, - - - - -	65	
Proportion of operating expenses and taxes for Michigan, main line, - - - - -	\$91,831 66	
<b>Total proportion of expenses for Michigan, - - - - -</b>		<b>\$91,831 66</b>
Percentage of expenses to earnings, 89.96.		
Net earnings per mile of road, - - - - -	\$102 37	
Net earnings per train mile, - - - - -	07.25	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Pontiac, Michigan, to Caseville, Michigan, October 8, 1883.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Pontiac to Caseville,	100.20	
Total length completed,		100.20
Total length of road belonging to this company,		100.20
Total length of road belonging to this company in Michigan,	100.20	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,	6.80	
Aggregate length of tracks in Michigan belonging to this company computed as single track,		107
Gauge of track, 4 feet 8½ inches.		

	Total Miles.	In Michigan.
Total miles operated by the company,	100.20	100.20

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of	3;	Aggregate length, feet,	210
Wooden trestles, number of	18;	Aggregate length, feet,	1,510
Total,	21;		1,720

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Michigan Central Railroad at Oxford.

Flint & Pere Marquette Railroad at Clifford.

Saginaw, Tuscola & Huron Railroad at Berne Junction.

What railroads cross your road either over or under your grade in this State, and where?

Over,—Chicago & Grand Trunk at Imlay City.

Under,—None.

At what crossings are interlocking and derailing switches in operation?

None.

Number of crossings of highways at grade in this State, 104

Number of crossings of highways at grade in this State at which there are gates or flagmen, None.

Number of crossings at which there are electric or automatic signals, None.

Number of crossings of highways over or under railroad (over 1; under 0), 1

Number of highway bridges 18 feet above track, 1

Have safety guards been erected at over-head obstructions? Yes.

Are your frogs and guard rails blocked as required by act 174, session laws 1883? Yes.

How are they treated? With plank blocking.

*Stations.*

Number of stations on whole line,	22
Same in Michigan,	22

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials,	109
Same in Michigan,	109

Classify your employés as per following list:

	Number.
Baggagemen,	2
Brakemen,	4
Conductors,	3
Engineers,	3
Firemen,	3
Laborers,	51
Shopmen,	16
Others,	27

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?	189.8
Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed.	
Tuscola county,	4.5
Huron county,	5.7
Total miles required,	10.2

*Road Bed and Track.*

Number of track sections in Michigan,	16
Average length of sections (miles),	6.26
Average number of men in each section gang,	3
Number of new ties put in whole line during the year,	63,297
Number of new ties put in track in Michigan,	63,297
Average number of new ties per mile of road,	631.76
New rails put in track:	
Steel (.05 tons), .006 miles.	

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender,	3	\$18,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender,	2	16,000 00
Total,	5	\$34,000 00
Number of passenger cars - 8 wheel, including official cars,	7	\$31,500 00
Number of express and baggage cars,	1	2,500 00
Number of box freight cars,	46	18,400 00

Number of stock cars, - - - - -	4	\$1,500 00
Number of platform cars, - - - - -	61	21,350 00
Number of conductors' way cars, - - - - -	1	450 00
Other cars as follows: Snow plow, - - - - -	1	800 00
Total, - - - - -	121	\$110,500 00

Number of locomotives equipped with power brakes, - - - - - 3

Number of passenger-train cars equipped with power brakes, - - - - - 8

Number of freight cars equipped with power brakes,—None.

What patterns of power breaks have you in use, and number of locomotives and cars with each? Westinghouse. Locomotives—3; cars—8.

Are your freight cars being equipped with automatic couplers as required by Act. No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? Blocker.

How are your passenger cars heated? Hot water circulation. Mason Anti-Fire Car Heater.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year, - - - - -	64,548
Miles run by freight trains during the year, - - - - -	31,287
Miles run by mixed trains, - - - - -	45,450
Total mileage of trains earning revenue, - - - - -	141,285

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried, - - - - -	740		
Number of local passengers carried, - - - - -	73,622		
Total number of passengers carried, - - - - -	74,362		
Total passenger mileage, or passengers carried one mile, - - - - -		1,505,336	
Average distance traveled by each passenger, - - - - -		20.2	
Average amount received from each passenger, - - - - -			\$0 50.45
Average rate of fare per mile for through passengers, - - - - -			01.38
Average rate of fare per mile for local passengers, - - - - -			02.55
Average rate of fare per mile for all passengers, - - - - -			02.49

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried, - - - - -	2,902		
Number of tons of local freight carried, - - - - -	52,510		
Total tons of freight carried, - - - - -	55,412		

	Miles.	Rate. Dollars. Cents.
Total mileage of through freight, - - -	290,200	
Total mileage of local freight, - - -	2,035,882	

Total freight mileage, or tons carried one mile, 2,326,082

Average ton haul for through freight, - - -	100	
Average ton haul for local freight, - - -	38.8	
Average ton haul for all freight, - - -	42	
Average amount received for each ton haul, - - -		\$1 01
Average rate per ton per mile, received for through freight, - - -		01.25
Average rate per ton per mile, received for local freight, - - -		02.58
Average rate per ton per mile, received for all freight, - - -		02.42

*Freight Forwarded at Michigan Stations.*

	Forwarded Tons.
Grain, - - - - -	9,531
Flour, - - - - -	2,187
Animals, - - - - -	3,319
Other agricultural products, - - - - -	5,376
Lumber and forest products, - - - - -	20,793
Coal, - - - - -	3,021
Plaster, lime and cement, - - - - -	288
Salt, - - - - -	1,476
Petroleum, - - - - -	243
Stone, brick and sand, - - - - -	84
Manufactures,—articles shipped from point of production, - - - - -	228
Merchandise and other articles not enumerated above, - - - - -	8,866
Total forwarded, - - - - -	55,412

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	9,531	17.20
Flour, - - - - -	2,187	3.95
Animals, - - - - -	3,319	5.99
Other agricultural products, - - - - -	5,376	9.70
Lumber and forest products, - - - - -	20,793	37.53
Coal, - - - - -	3,021	5.45
Plaster, lime and cement, - - - - -	288	.52
Salt, - - - - -	1,476	2.66
Petroleum, - - - - -	243	.44
Stone, brick and sand, - - - - -	84	.15
Manufactures,—articles shipped from point of production, - - - - -	228	.41
Merchandise and other articles not enumerated above, - - - - -	8,866	16.00
Total tons carried, - - - - -	55,412	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc. ; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company, one and one-half, and one and one-tenth first-class freight rates, and half fare for messengers. Do a general express business. Take their freights at depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
100 miles, owned jointly by this company and Western Union Telegraph Company.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

Killed, - - - - - None.

## INJURED.

November 25, Joseph Baker, brakeman, Pontiac. Coupling; from lack of caution.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....					1	
Deraillments.....						
Falling from trains.....						
Frogs.....						
Getting on and off trains.....						
Highway crossings.....						
Miscellaneous.....						
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on tracks.....						
Total.....					1	

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	-
Number of persons injured during the year,	1
Number of casualties purely accidental,	-
Number resulting from lack of caution, carelessness, or misconduct,	1
Persons killed or injured while intoxicated,	-
Trespassers and tramps killed or injured,	-
Suicides,	-

## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....		1	1
Conductors.....			
Engineers.....			
Firemen.....			
Laborers.....			
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....		1	1

STATE OF MICHIGAN, }  
COUNTY OF OAKLAND, } ss.

James Houston, General Superintendent, and W. C. Sanford, Auditor, of the Pontiac, Oxford & Northern Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

JAMES HOUSTON.

W. C. SANFORD.

Subscribed and sworn to before me this 1st day of April, A. D. 1890.

FRANK H. CARROLL, *Notary Public.*

ANNUAL REPORT  
OF THE  
DETROIT, BAY CITY & ALPENA RAILROAD COMPANY,

*For the Year Ending Dececeember 31, 1889.*

[Filed April 3, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President and General Manager*, R. A. ALGER, Detroit, Mich.  
*Vice President and Treasurer*, M. S. SMITH, Detroit, Mich.  
*Secretary*, T. H. NEWBERRY, Detroit, Mich.  
*Auditor*, J. C. McCAUL, Detroit, Mich.  
*General Superintendent*, MILO EASTMAN, East Tawas, Mich.  
*General Freight Agent*, J. C. McCAUL, Detroit, Mich.  
*Attorney*, A. M. HENRY, Detroit, Mich.

DIRECTORS.

R. A. ALGER, Detroit, Mich.  
M. S. SMITH, Detroit, Mich.  
JAMES McMILLAN, Detroit, Mich.  
HUGH McMILLAN, Detroit, Mich.  
J. H. NEWBERRY, Detroit, Mich.  
J. C. McCAUL, Detroit, Mich.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—Feb. 13, 1880. Amended Articles April 21, 1883.

Number of stockholders at date of last election,	- - - - -	9
Number of stockholders in Michigan at same date,	- - - - -	8
Amount of full paid stock held in Michigan at same date,	- - -	\$1,670,000 00
Date of annual meeting of stockholders,—Third Tuesday in May.		
Fiscal year of company ends, December 31.		
General offices of the company are located at Detroit, Mich.		



## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$487,209 43
Total expenses, including taxes, - - - - -	\$290,791 37	
Net income, - - - - -		\$196,418 06
Interest on funded debt, - - - - -	\$150,000 00	
Balance applicable to dividends, - - - - -		46,418 06
Balance for the year, - - - - -		\$46,418 06
Balance (profit and loss) last year, - - - - -		29,268 01
Balance forward to next year, - - - - -	\$75,686 07	
	\$75,686 07	\$75,686 07

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, - -	\$2,000,000 00
Par value of shares, - - - - -	\$100 00
Number of shares issued, - - - - -	16,700
Amount paid in on common, - - - - -	\$1,670,000 00
Total amount paid in, as per books of the company, - -	\$1,670,000 00
Paid in per mile of road owned by company,—209.32 miles, - - - - -	\$7,978 21

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage, January 1, 1883.....	6%	January 1, 1913.....	New York.....	\$2,500,000 00
Total funded debt.....				\$2,500,000 00

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For Construction.....		
For Equipment.....		
For Real Estate.....		
For Renewals.....		
For Miscellaneous.....		
For Current Balances.....		\$48,919 98
Total Unfunded Debt.....		\$48,919 98

## RECAPITULATION.

Total funded debt,	- - - - -	\$2,500,000 00
Total unfunded debt,	- - - - -	43,919 98
Total debt liabilities,	- - - - -	<u>\$2,543,919 98</u>
Amount of debt liabilities per mile of road,—209.32 miles,		11,943 53
Total amount of stock and debt,	- - - - -	<u>\$4,213,919 98</u>
Stock and debt per mile of road,—209.32 miles,	- - - - -	19,921 74

## GENERAL BALANCE SHEET.—DR.

Construction account,	- - - - -	\$3,829,173 15
Equipment account,	- - - - -	413,401 31
		<u>\$4,242,574 46</u>
Cash items:		
Cash,	- - - - -	\$4,421 51
Bills receivable,	- - - - -	6,921 59
Due from agents,	- - - - -	6,297 85
		<u>17,640 95</u>
Other assets:		
Materials and supplies,	- - - - -	\$14,008 90
Debit balances from companies and individuals,	- - - - -	15,381 74
		<u>29,390 64</u>
Total,	- - - - -	<u>\$4,289,606 05</u>

## GENERAL BALANCE SHEET.—CR.

Capital stock,	- - - - -	\$1,670,000 00
Funded debt,	- - - - -	2,500,000 00
		<u>\$4,170,000 00</u>
Unfunded debt:		
Notes payable,	- - - - -	\$30,314 84
Vouchers and accounts,	- - - - -	13,605 14
		<u>43,919 98</u>
Profit and loss or income accounts,	- - - - -	75,686 07
Total,	- - - - -	<u>\$4,289,606 05</u>

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment,	- - - - -	\$4,242,574 46
Average cost per mile of road, not including sidings,—203.63 miles,	- - - - -	20,834 72
Proportion of cost for Michigan.	- - - - -	<u>4,242,574 46</u>

*Purchased by Present Company.*

When purchased,—July 11, 1882.

Original cost to present company of road and equipment,	\$107,664 42
Amount expended since purchase, account of construction,	3,721,508 73
Amount expended since purchase, account of equipment,	413,401 31
Total cost to date of report,	4,242,574 46
Average cost per mile of road not including sidings, —203.63 miles,	20,834 72
Proportion of cost for Michigan,	4,242,574 46

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

Main line:

Extensions and new sidings,	\$32,798 63
New buildings,	229 76
Total charges,	\$33,028 39
Total charges to property account as above,	33,028 39
Net addition to property account,	\$33,028 39

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line:

Local fares,	\$88,725 80
Total passenger fares,	\$88,725 80
Express and baggage,	1,908 49
Mails,	11,168 13
Other sources,	6,574 15
Total passenger department earnings,	\$108,376 57
Proportion for Michigan,	\$108,376 57
Per train mile,	1 64
Per mile of road,	532 22

## FREIGHT EARNINGS.

Main line:

Local traffic,	\$376,729 19
Total traffic,	\$376,729 19
Total freight department earnings,	376,729 19
Proportion for Michigan,	\$376,729 19
Per train mile,	99
Per mile of road,	1,850 07
Total transportation earnings,	\$485,105 76

Transportation earnings per mile of road,	\$2,382	29	
Transportation earnings per train mile,		88	
From other sources,			\$2,103 67
Total earnings from operation of road,			\$487,209 43
Total earnings per mile of road,	\$2,392	62	
Total earnings per train mile,		89	
Proportion of taxable earnings for Michigan,			487,209 43
Total taxable earnings per mile of road in Michigan,	2,392	62	
Total income from all sources,			\$487,209 43
Proportion of income for Michigan,			487,209 43

## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track,	\$45,688	53
Renewals of rails and ties,	3,159	55
Repairs of bridges, including culverts and cattle guards,	1,614	09
Repairs of fences, road crossings and signs,	61	20
Repairs of buildings,	1,272	50
Total,	\$51,795	87

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives,	\$3,272	16
Repairs of passenger cars,	2,796	58
Repairs of freight cars,	9,217	55
Total,	\$15,286	29

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives,	\$55,605	15
Water supply,	3,133	85
Oil and waste,	2,240	23
Locomotive service,	56,350	01
Train service,	36,974	35
Train supplies,	919	14
Mileage of passenger cars,	3,416	22
Mileage of freight cars,	4,795	64
Telephone expenses (maintenance and operating),	2,344	64
Damage and loss of freight and baggage,	2,442	73
Damages to property and cattle,		
Personal injuries,	1,738	80
Agents and station service,	16,422	34
Station supplies,	798	63
Loading and unloading logs,	1,176	95
Total,	\$188,358	68

## CLASS 4.—General Expenses.

Salaries of the general officers of the company,	-	-	\$10,000	00
Salaries of clerks in general offices,	-	-	6,771	84
Law expenses,	-	-	2,506	17
Insurance,	-	-	677	65
Stationery and printing,	-	-	1,558	42
Contingencies,	-	-	4,433	53
Taxes,	-	-	9,402	92
Total,	-	-	\$35,350	53

## RECAPITULATION OF EXPENSES.

	Per cent of Expenses.	
Maintenance of way and buildings,	17.81	\$51,795 87
Maintenance of motive power and cars,	5.26	15,286 29
Conducting transportation,	64.77	188,358 68
General expenses, including taxes,	12.16	35,350 53
Total operating expenses and taxes,	100.00	\$290,791 37
Operating expenses and taxes per mile of road,	\$1,428 04	
Operating expenses and taxes per train mile run, for train earning revenue,—548,328 miles,	53	
Proportion of operating expenses and taxes for Michigan:		
Main line,	290,791 37	
Total proportion of expenses for Michigan,		\$290,791 37
Percentage of expenses to earnings,—59.91.		
Net earnings per mile of road,	\$964 58	
Net earnings per train mile,	36	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Alger to Alpena, September 20, 1886.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Alger to Alpena,	105.00	
Total length completed,		105.00

## BRANCHES.

Loon Lake branch, from Emery Junction to Potts Lake,	26.39	
Mud Lake branch, from Mud Lake Junction to Mud Lake,	18.44	
Others,	59.49	
Total length of branches owned by company,		104.32

	Miles. 100ths.	Miles. 100ths.
Total length of branches owned by company in Michigan,	104.32	
Total length of road belonging to this company,	-	209.32
Total length of road belonging to this company in Michigan,	209.32	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,	23.66	
Aggregate length of tracks in Michigan belonging to this company, computed as single track,	-	232.98

Gauge of track, 4 feet 8½ inches.

	♥Total Miles.	In Michigan.
Total miles operated by the company,	209.32	209.32

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of	13; aggregate length, feet,	139,400
Iron bridges, number of,	2; aggregate length, feet,	43,600
Combination bridges, number of,	2; aggregate length, feet,	143,700
Wooden trestles, number of,	9; aggregate length, feet,	215,800
Total,	26;	542,500

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?  
None.

What railroads cross your road either over or under your grade in this State and where? None.

Number of crossings of highways at grade in this State, 90

Are your frogs and guard rails blocked as required by Act  
174, Session Laws 1883? Yes.

*Stations.*

Number of stations on whole line,	31
Same in Michigan,	31

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials,	350
Same in Michigan,	350

Classify your employes as per following list:

Baggagemen,	2
Brakemen,	50
Conductors,	25
Engineers,	25
Firemen,	25
Laborers,	183
Shopmen,	10
Yardmen,	1
Others,	29

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - 30

*Road Bed and Track.*

Number of track sections in Michigan, - - - 27  
 Average length of sections,—miles, - - - 8  
 Average number of men in each section gang, - - - 4  
 Number of new ties put in whole line during the year, 20,997  
 Number of new ties put in track in Michigan, - - - 20,997

*Bridges and Culverts.*

Amount of trestle work replaced with earth during the year  
 (linear feet), - - - 30  
 Timber culverts replaced during the year, - - - None.  
 New bridges built during the year, - - - None.

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - -	19	
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - -	1	
Total, - - -	20	\$144,750 00
Number of passenger cars—8 wheel, includ- ing official cars, - - -	5	18,000 00
Number of express and baggage cars, - - -	2	5,000 00
Number of box freight cars, - - -	38	16,150 00
Number of platform cars, - - -	310	99,200 00
Number of logging trucks, - - -	300	34,800 00
Number of conductors' way cars, - - -	5	1,250 00
Other cars,—derrick, - - -	1	1,800 00
Total, - - -	661	\$320,950 00

Number of locomotives equipped with power  
brakes, - - - 20  
 Number of passenger-train cars equipped with  
power brakes, - - - 7  
 Number of freight cars equipped with power brakes, None.

What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse and American.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? No.

How are your passenger cars heated? Smith & Owen,—hot water heater.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year,	-	-	66,150
Miles run by freight trains during the year,	-	-	378,660
Miles run by mixed trains,	-	-	103,518
Total mileage of trains earning revenue,	-	-	548,328

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Number of local passengers carried,	113,764		
Total number of passengers carried,	113,764		
Total passenger mileage, or passengers carried one mile,		3,564,436	
Average distance traveled by each passenger,		31.33	
Average amount received from each passenger,			\$0 78
Average rate of fare per mile for local passengers,			02.49
Average rate of fare per mile for all passengers,			02.49

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of local freight carried,	871,763		
Total tons of freight carried,	871,763		
Total freight mileage, or tons carried one mile,		29,399,429	
Average ton haul for local freight,		33.7	
Average ton haul for all freight,		33.7	
Average amount received for each ton haul,			\$0 43
Average rate per ton per mile, received for local freight,			01.30
Average rate per ton per mile, received for all freight,			01.30

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	3,080
Flour,	1,508
Provisions (beef, pork, lard, etc.),	1,696
Animals,	459
Other agricultural products,	1,800
Lumber and forest products,	842,601
Coal,	566
Plaster, lime and cement,	208
Salt,	3,652



	Tons.
Petroleum,	466
Railroad iron, iron and steel rails,	2,514
Other iron and castings,	510
Stone, brick and sand,	437
Manufactures—articles shipped from point of production,	890
Merchandise and other articles not enumerated above,	11,376
<b>Total forwarded,</b>	<b>871,763</b>

*Tonnage of Articles Transported—Entire Road.*

	Tons.	Per Cent.
Grain,	3,080	.353
Flour,	1,508	.173
Provisions (beef, pork, lard, etc.),	1,696	.194
Animals,	459	.053
Other agricultural products,	1,800	.207
Lumber and forest products,	842,601	96.654
Coal,	566	.065
Plaster, lime and cement,	208	.024
Salt,	3,652	.419
Petroleum,	466	.053
Railroad iron, iron and steel rails,	2,514	.288
Other iron and castings,	510	.058
Stone, brick and sand,	437	.052
Manufactures,—articles shipped from point of production,	890	.102
Merchandise and other articles not enumerated above,	11,376	1.305
<b>Total tons carried,</b>	<b>871,763</b>	<b>100.00</b>

**ADDITIONAL QUESTIONS.***Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company. Rate one and one-half first-class as local business, first-class as through business. A general Express business. Freights taken at depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
210 miles, Western Union Telegraph Co.

*Transportation Companies.***SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.**

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad com-

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year,	-	-	66,150
Miles run by freight trains during the year,	-	-	378,660
Miles run by mixed trains,	-	-	103,518
Total mileage of trains earning revenue,	-	-	548,328

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Number of local passengers carried,	113,764		
Total number of passengers carried,	113,764		
Total passenger mileage, or passengers carried one mile,		3,564,436	
Average distance traveled by each passenger,		31.33	
Average amount received from each passenger,			\$0 78
Average rate of fare per mile for local passengers,			02.49
Average rate of fare per mile for all passengers,			02.49

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of local freight carried,	871,763		
Total tons of freight carried,	871,763		
Total freight mileage, or tons carried one mile,		29,399,429	
Average ton haul for local freight,		33.7	
Average ton haul for all freight,		33.7	
Average amount received for each ton haul,			\$0 43
Average rate per ton per mile, received for local freight,			01.30
Average rate per ton per mile, received for all freight,			01.30

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	3,080
Flour,	1,508
Provisions (beef, pork, lard, etc.),	1,696
Animals,	459
Other agricultural products,	1,800
Lumber and forest products,	842,601
Coal,	566
Plaster, lime and cement,	208
Salt,	3,652

	Tons.
Petroleum,	466
Railroad iron, iron and steel rails,	2,514
Other iron and castings,	510
Stone, brick and sand,	437
Manufactures—articles shipped from point of production,	890
Merchandise and other articles not enumerated above,	11,376
<b>Total forwarded,</b>	<b>871,763</b>

*Tonnage of Articles Transported—Entire Road.*

	Tons.	Per Cent.
Grain,	3,080	.353
Flour,	1,508	.173
Provisions (beef, pork, lard, etc.),	1,696	.194
Animals,	459	.053
Other agricultural products,	1,800	.207
Lumber and forest products,	842,601	96.654
Coal,	566	.065
Plaster, lime and cement,	208	.024
Salt,	3,652	.419
Petroleum,	466	.053
Railroad iron, iron and steel rails,	2,514	.288
Other iron and castings,	510	.058
Stone, brick and sand,	437	.052
Manufactures,—articles shipped from point of production,	890	.102
Merchandise and other articles not enumerated above,	11,376	1.305
<b>Total tons carried,</b>	<b>871,763</b>	<b>100.00</b>

**ADDITIONAL QUESTIONS.***Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company. Rate one and one-half first-class as local business, first-class as through business. A general Express business. Freights taken at depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

210 miles, Western Union Telegraph Co.

*Transportation Companies.***SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.**

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad com-

pany have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Wagner Palace Car Company, New York, mileage, . . . \$2,141.91

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Amour Refrigerator Line, Chicago, Illinois, . . . . .	\$0 89
Arms Palace Horse Car Co., Chicago, Illinois, . . . . .	5 16
Blue Line, Rochester, N. Y., . . . . .	435 62
Canada Southern Line, Rochester, N. Y., . . . . .	178 21
Columbus & Hocking, C. & J. Co., Columbus, Ohio, . . . . .	7 03
Empire Line, Philadelphia, Pennsylvania, . . . . .	2 09
Great Eastern Line, Detroit, Michigan, . . . . .	78
G. H. Hammond & Co., Chicago, Illinois, . . . . .	90 50
Merchants' Despatch Transportation Co., New York, N. Y., . . . . .	105 88
Midland Line, Buffalo, N. Y., . . . . .	2 29
Mattoon Manufacturing Co., Sheboygan, Wisconsin, . . . . .	76
National Car Co., St. Albans, Vermont, . . . . .	6 96
Ohio Coal Exchange, Columbus, Ohio, . . . . .	54
Pittsburg & Toledo Despatch, Alleghany, Pennsylvania, . . . . .	16 93
Red Line Transit Co., Buffalo, N. Y., . . . . .	6 32
Swift Refrigerator Transportation Co., Chicago, Illinois, . . . . .	138 49
Somers Coal Co., Columbus, Ohio, . . . . .	33 24
Union Line, Pittsburg, Pennsylvania, . . . . .	2 94

REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

KILLED.

January 2, Joseph Gouthier, Sr., citizen, Tawas City. Struck by locomotive on highway crossing; company exonerated.

April 4, Mrs. J. McGuire, citizen, Handy. Walking on track; carelessness.

June 4, William Sullivan, citizen, AuSable. Lying on track; intoxicated.

July 31, John Dewar, brakeman, Tawas Junction. Fell from train; carelessness.

November 7, Martin Hogan, Whitney Branch. Thrown from train; accidental.

INJURED.

January 29, W. Sweeney, brakeman, Alpena. Finger crushed; coupling cars.

June 22, F. McGuire, brakeman, Alpena. Carelessness.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....					2	
Derailements.....						
Falling from trains.....		2				
Frogs.....						
Getting on and off trains.....						
Highway crossings.....			1			
Miscellaneous.....						
Overhead obstructions.....						
Trespassers on trains.....			2			
Trespassers on track.....						
Total.....		2	3		2	

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year, - - - -	5
Number of persons injured during the year, - - - -	2
Number of casualties purely accidental, - - - -	3
Number resulting from lack of caution, carelessness, or misconduct, - - - -	3
Persons killed or injured while intoxicated, - - - -	1

## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....	1	2	3
Conductors.....	1		1
Engineers.....			
Firemen.....			
Laborers.....			
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....	2	2	4

STATE OF MICHIGAN, }  
COUNTY OF WAYNE. } ss.

Russell A. Alger, President, and J. C. McCaul, Auditor, of the Detroit, Bay City and Alpena Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

R. A. ALGER,  
J. C. McCAUL,

Subscribed and sworn to before me this 2d day of April, A. D. 1890.

G. H. STALKER, *Notary Public.*

ANNUAL REPORT  
OF THE  
SAGINAW, TUSCOLA AND HURON RAILROAD COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed April 4, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, WM. L. WEBBER, East Saginaw, Mich.  
*Vice President*, GEO. W. MORLEY, East Saginaw, Mich.  
*Secretary and Treasurer*, E. T. JUDD, East Saginaw, Mich.  
*Auditor*, JAS. G. HARRIS, East Saginaw, Mich.  
*Superintendent*, M. V. MEREDITH, East Saginaw, Mich.

DIRECTORS.

WM. L. WEBBER, East Saginaw, Mich.  
E. T. JUDD, East Saginaw, Mich.  
O. F. WISNER, East Saginaw, Mich.  
JOHN S. ESTABROOK, East Saginaw, Mich.  
GEO. W. MORLEY, East Saginaw, Mich.  
JAS. B. PETER, East Saginaw, Mich.  
H. C. POTTER, East Saginaw, Mich.

Terms expire May 16, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—February 24, 1881.

Number of stockholders at date of last election,	-	-	-	-	131
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Number of stockholders in Michigan at same date,	-	-	-	-	126
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Amount of full paid stock held in Michigan at same date,	-	-	-	-	\$607 00
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Date of annual meeting of stockholders,—May 16, 1890.

Fiscal year of company ends December 31.

General offices of the company are located at East Saginaw, Mich.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -	- - - - -	\$106,984 22
Total expenses, including taxes, - - - - -	\$77,029 41	
Net income, - - - - -	- - - - -	29,954 81
Interest on funded debt, - - - - -	\$11,400 00	
Interest on unfunded debt, - - - - -	22,927 87	
	\$34,327 87	
Balance for the year, - - - - -	\$4,373 06	
Balance (profit and loss) last year, - - - - -	42,156 09	
Balance forward to next year, - - - - -	- - - - -	46,529 15
	\$46,529 15	\$46,529 15

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, - - - - -	\$600,000 00
Par value of shares, - - - - -	\$100 00
Number of shares issued, - - - - -	1,233
Amount paid in on common, - - - - -	\$123,300 00
Amount paid in on shares not issued,—number, - - - - -	6 255 38
Total amount paid in as per books of the company, - - - - -	\$123,555 38
Paid in per mile of road owned by company, —66.57 miles, - - - - -	\$1,856 02

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage, September 1, 1881.....	6%	September 1, 1921.....	New York.....	\$190,000 00
Total funded debt.....				\$190,000 00

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For construction.....		\$397,311 49
For equipment.....		32,848 99
For real estate.....		
For renewals.....		
For miscellaneous.....		2,852 71
For current balances.....		19,363 81
Total unfunded debt.....		\$452,277 00



## RECAPITULATION.

Total funded debt,	\$190,000 00
Total unfunded debt,	452,277 00
Total debt liabilities,	<u>\$642,277 00</u>
Amount of debt liabilities per mile of road,—66.57 miles,	9,648 14
Total amount of stock and debt,	<u>\$765,832 38</u>
Stock and debt per mile of road,—66.57 miles,	11,504 16

## GENERAL BALANCE SHEET.—Dr.

Construction account,	\$523,544 33	
Equipment account,	110,069 38	
		<u>\$633,613 71</u>
Cash items:		
Cash,	\$3,690 10	
Bills receivable,	917 00	
Due from agents,	765 15	
		<u>5,372 25</u>
Other assets:		
Materials and supplies,	\$7,721 12	
Debit balances from companies and individuals,	11,330 31	
Bay Port Quarries,	50,004 10	
Bay Port Hotel,	11,261 74	
		<u>80,317 27</u>
Balance,		46,529 15
Total,		<u>\$765,832 38</u>

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	\$123,555 38
Funded debt,	190,000 00
Unfunded debt:	
Interest unpaid, accrued not due,	\$3,800 00
Vouchers and accounts,	448,477 00
	<u>\$452,277 00</u>
Profit and loss or income accounts,	\$452,277 00
Total,	<u>\$765,832 38</u>

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment,	\$633,613 71
Average cost of construction per mile of road—not included sidings,—66.57 miles,	9,518 00
Proportion of cost for Michigan,	633,613 71

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings, - - - - -	\$1,953 43
New fences, - - - - -	22 00
New cars, - - - - -	5,527 80
Total charges, - - - - -	<u>\$7,503 23</u>
Total charges to property account as above, - - -	7,503 23
Property sold and credited, - - - - -	544 28
Net addition to property account, - - - - -	<u>\$6,958 95</u>

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares, - - - - -	\$32,528 98
Through fares, - - - - -	6,540 57
Total passenger fares, - - - - -	<u>\$39,069 55</u>
Express and baggage, - - - - -	418 18
Mails, - - - - -	2,891 49
Total passenger department earnings, - - - - -	<u>\$42,379 22</u>
Proportion for Michigan, - - - - -	\$42,379 22
Per train mile, - - - - -	49
Per mile of road, - - - - -	636 61

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic, - - - - -	\$60,255 06
Through traffic, - - - - -	3,935 77
Total traffic, - - - - -	<u>\$64,190 83</u>
Total freight department earnings, - - - - -	<u>\$64,190 83</u>
Proportion for Michigan, - - - - -	\$64,190 83
Per train mile, - - - - -	1 09
Per mile of road, - - - - -	964 26
Total transportation earnings, - - - - -	<u>\$106,570 05</u>
Transportation earnings per mile of road, - - -	\$1,600 87
Transportation earnings per train mile, - - -	73
Miscellaneous receipts from operating account, other than for transportation, as follows:	
From telegraph, - - - - -	\$414 17
Total earnings from operation of road, - - - - -	<u>106,984 22</u>

Total earnings per mile of road,	\$1,607 09	
Total earnings per train mile,	73.2	
Proportion of taxable earnings for Michigan,		\$106,984 22
Total taxable earnings per mile of road in Michigan,	1,607 09	
Total income from all sources,		\$106,984 22
Proportion of income for Michigan,		106,984 22

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track,	\$15,863 24
Renewals of rails,	2,143 73
Renewals of ties,	2,342 84
Repairs of bridges, including culverts and cattle guards,	553 39
Repairs of fences, road crossings, and signs.	1,791 47
Repairs of buildings,	307 62
Total,	\$23,002 29

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives,	\$3,207 08
Repairs of passenger cars,	1,794 00
Repairs of freight cars,	3,109 69
Total,	\$8,110 77

## CLASS 3.—Conducting Transportation.

Fuel for locomotives,	\$9,732 54
Water supply,	840 10
Oil and waste,	1,003 04
Locomotive service,	9,622 56
Passenger train service,	3,252 50
Passenger train supplies,	557 03
Mileage of passenger cars,	89 60
Freight train service,	4,646 81
Freight train supplies,	65 14
Mileage of freight cars,	204 24
Damage and loss of freight and baggage,	7 18
Damages to property and cattle,	290 03
Personal injuries,	203 50
Agents and station service,	6,397 39
Station supplies,	423 67
Total,	\$37,335 33

## CLASS 4.—General Expenses.

Salaries of the general officers of the company,	\$3,024 99
Salaries of clerks in general offices,	1,110 00
Law expenses,	4 16

Insurance, - - - - -	\$175 55
Stationery and printing, - - - - -	1,030 25
Outside agencies and advertising, - - - - -	259 72
Contingencies, - - - - -	811 27
Taxes, - - - - -	2,165 08
Total, - - - - -	<u>\$8,581 02</u>

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - -	29.86	\$23,002 29
Maintenance of motive power and cars, - - -	10.52	8,110 77
Conducting transportation, - - - - -	48.47	37,335 33
General expenses, including taxes, - - - - -	11.15	8,581 02
Total operating expenses and taxes, - - -	100.00	<u>\$77,029 41</u>
Operating expenses and taxes per mile of road, -	\$1,157 11	
Operating expenses and taxes per train mile run, for trains earning revenue,—144,737 miles, -	53.2	
Proportion of operating expenses and taxes for Michigan:		
Main line, - - - - -	77,029 41	
Total proportion of expenses for Michigan, - - -		<u>\$77,029 41</u>
Percentage of expenses to earnings,—72%.		
Net earnings per mile of road, - - - - -	\$449 97	
Net earnings per train mile, - - - - -	20.7	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From East Saginaw to Sebewaing, April 4, 1882.

From Sebewaing to Bay Port, June 15, 1884.

From Bay Port to Bad Axe, July 1, 1886.

Quarry Junction Branch to Bay Port Quarry, November, 1883.

## MAIN LINE.

	Miles, 100ths.	Miles, 100ths.
In Michigan, from East Saginaw to Bad Axe, - - -	64.38	
Total length completed, - - - - -		<u>64.38</u>

## BRANCHES.

From Bay Port Junction to Bay Port, - - - - -	1.38
From Quarry Junction to Quarry, - - - - -	.81
Total length of branches owned by company, - - -	<u>2.19</u>

	Miles. 100ths.	Miles. 100ths.
Total length of branches owned by company in Michigan,	2.19	
Total length of road belonging to this company,		66.57
Total length of road belonging to this company in Michigan,	66.57	
Aggregate length in Michigan, of sidings, spurs, and other tracks not above enumerated,	9.29	
Aggregate length of tracks in Michigan belonging to this company, computed as single track,		75.86

Gauge of track, 3 feet.

	Total Miles.	In Michigan.
Total miles operated by the company,	66.57	66.57

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of	11;	aggregate length, feet,	1,297
Total,	11;		1,297

*Draw Bridges in Michigan.*

How many on your line? 1

Where located, when built and length of draw span.

Sebewaing, 1882, 43 feet, 9 inches.

Character of structure:

Jack-knife draw.

Material of which constructed:

Wood and iron.

Height above water, and depth of water under bridge:

Height 6 feet, depth of water 7 feet.

How swung, by engine or hand power?

Hand power.

Approaches, straight or curved:

Straight.

Do you require all trains to come to a full stop before crossing a draw, and how are they signalled?

Full stop. By flag and lamp.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Michigan Central Railroad at Reese.

Pontiac, Oxford and Northern Railroad at Berne Junction.

What railroads cross your road either over or under your grade in this State, and where? None.

Number of crossings of highways at grade in this State, 89

Number of crossings of highways at grade in this State at which there are gates or flagmen, 4

Are your frogs and guard rails blocked as required by act 174, session laws of 1883, Yes.

How are they treated? Wooden blocks bolted on.

*Stations.*

Number of stations on whole line, - - - - -	18
Same in Michigan, - - - - -	18

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials, - - - - -	81
Same in Michigan, - - - - -	81

Classify your employés as per following list:

	NUMBER.
Brakemen, - - - - -	6
Conductors, - - - - -	3
Engineers, - - - - -	5
Firemen, - - - - -	5
Laborers, - - - - -	33
Shopmen, - - - - -	4
Others, - - - - -	25

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - -	133.14
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*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	11
Average length of sections (miles), - - - - -	6
Average number of men in each section gang, - - - - -	3
Number of new ties put in whole line during the year, - - - - -	21,572
Number of new ties put in track in Michigan, - - - - -	21,572
Average number of new ties per mile of road, - - - - -	324
New rails put in track:	
Iron (tons 69.9) miles, 1.27.	
Total miles of track laid with new rails, - - - - -	1.27

*Bridges and Culverts.*

Amount of trestle work replaced with earth during year (linear feet), - - - - -	None.
Timber culverts replaced during the year, - - - - -	None.
New bridges built during the year,—number, - - - - -	None.

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	3	\$14,000 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender, - - - - -	5	17,000 00
Total, - - - - -	8	\$31,000 00

Number of passenger cars—8-wheel, including official cars, - - - - -	8	\$12,000 00
Number of express and baggage cars, - - - - -	4	3,000 00
Number of box freight cars, - - - - -	97	34,000 00
Number of stock cars, - - - - -	9	2,000 00
Number of platform cars, - - - - -	129	22,000 00
Number of conductors' way cars, - - - - -	2	600 00
Other cars, - - - - -	24	700 00
Total, - - - - -	273	\$105,300 00

Number of locomotives equipped with power brakes, - - - - -	8
Number of passenger-train cars equipped with power brakes, - - - - -	8
Number of freight cars equipped with power brakes, - - - - -	83
What patterns of power brakes have you in use, and number of locomotives and cars with each? Eames' Vacuum, 8 locomotives, 8 coaches, 3 baggage cars.	
Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.	
What pattern or patterns have you adopted for use? McCree.	
How are your passenger cars heated? Spear heater.	

#### MILEAGE, TRAFFIC, ETC.

##### *Train Mileage.*

Miles run by passenger trains during the year, - - -	86,204
Miles run by freight trains during the year, - - -	58,533
Total mileage of trains earning revenue, - - -	144,737

##### *Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried, - - -	3,502		
Number of local passengers carried, - - -	69,271		
Total number of passengers carried, - - -	72,773		

Total passenger mileage, or passengers carried one mile, - - -	1,774,645
Average distance traveled by each passenger, - - -	24
Average amount received from each passenger, - - -	\$0 53.000
Average rate of fare per mile for through passengers, - - -	02.782
Average rate of fare per mile for local passengers, - - -	02.047
Average rate of fare per mile for all passengers, - - -	02.201

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	3,165		
Number of tons of local freight carried,	82,825		
Total tons of freight carried,	85,990		
Total mileage of through freight,		212,098	
Total mileage of local freight,		3,415,435	
Total freight mileage, or tons carried one mile,		3,627,533	
Average ton haul for through freight,		67	
Average ton haul for local freight,		41	
Average ton haul for all freight,		42	
Average amount received for each ton haul,			74.600
Average rate per ton per mile received for through freight,			01.855
Average rate per ton per mile, received for local freight,			01.764
Average rate per ton per mile, received for all freight,			01.769

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	3,146
Flour,	1,118
Provisions (beef, pork, lard, etc.),	957
Animals,	33
Other agricultural products,	809
Lumber and forest products,	35,958
Coal,	114
Plaster, lime and cement,	1,665
Salt,	403
Petroleum,	168
Other iron and castings,	33
Stone, brick and sand,	37,250
Manufactures,—articles shipped from point of production,	267
Merchandise and other articles not enumerated above,	4,069
Total forwarded,	85,990

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain,	3,146	03.65
Flour,	1,118	01.30
Provisions (beef, pork, lard, etc.),	957	01.11
Animals,	33	00.04
Other agricultural products,	809	00.94
Lumber and forest products,	35,958	41.81
Coal,	114	00.15
Plaster, lime and cement,	1,665	01.95
Salt,	403	00.46
Petroleum,	168	00.19
Other iron and castings,	33	00.04



	Tons.	Per Cent.
Stone, brick and sand,	37,250	43.32
Manufactures,—articles shipped from point of production,	267	00.31
Merchandise and other articles not enumerated above,	4,069	04.73
Total tons carried,	85,990	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies? American Express Company, one and one-half first-class rates, freight taken from depot.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
66.57 miles, owned by this company.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

April 13, Arthur Lucas, Unionville. Driving on track in front of train; his own fault.

## INJURED.

February 16, Philip Harsch, brakeman, Bay Port Junction. Carelessness.

March 2, Charles Pomeranki, brakeman, Sebewaing. Carelessness.

April 13, Robert Smith, Unionville. Carelessness.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....					2	
Deraillments.....						
Falling from trains.....						
Frogs.....						
Getting on and off trains.....						
Highway crossings.....			1			1
Miscellaneous.....						
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on tracks.....						
Total.....			1		2	1

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	- - - - -	1
Number of persons injured during the year,	- - - - -	3
Number of casualties purely accidental,	- - - - -	—
Number resulting from lack of caution, carelessness, or misconduct,	- - - - -	4
Persons killed or injured while intoxicated,	- - - - -	—
Trespassers and tramps killed or injured,	- - - - -	—
Suicides,	- - - - -	—

## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....		2	
Conductors.....			
Engineers.....			
Firemen.....			
Laborers.....			
Shopmen.....			
Yardmen.....			
Not classified above.....	1	1	
Total.....	1	3	

STATE OF MICHIGAN, }  
COUNTY OF SAGINAW, } ss.

Wm. L. Webber, President, and Jas. G. Harris, Auditor, of the Saginaw, Tuscola & Huron Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

WM. L. WEBBER.

JAS. G. HARRIS.

Subscribed and sworn to before me this 3d day of April, A. D. 1890.

SAMUEL G. HIGGINS, *Notary Public.*

ANNUAL REPORT  
OF THE  
CHICAGO, DETROIT & CANADA GRAND TRUNK JUNCTION  
RAILWAY COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 5, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, SIR JOSEPH HICKSON, Montreal, Quebec.  
*Vice President*, L. J. SEARGEANT, Montreal, Quebec.  
*Secretary*, ROBT. WRIGHT, Montreal, Quebec.  
*Accountant*, JAS. H. MUIR, Detroit, Mich.  
*General Manager*, W. J. SPICER, Detroit, Mich.  
*Superintendent*, A. B. ATWATER, Detroit, Mich.  
*Chief Engineer*, GEORGE MASSON, Detroit, Mich.  
*Attorney*, E. W. MEDDAUGH, Detroit, Mich.

DIRECTORS.

SIR JOSEPH HICKSON, Montreal, Quebec.  
L. J. SEARGEANT, Montreal, Quebec.  
JOHN BELL, Belleville, Ontario.  
E. W. MEDDAUGH, Detroit, Mich.  
ROBT. WRIGHT, Montreal, Quebec.

Terms expire September, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed, --March 18, 1858.

Number of stockholders at date of last election,	- - - - -	23
Number of stockholders in Michigan at same date,	- - - - -	1
Amount of full paid stock held in Michigan at same date,	- - - - -	\$100.00
Date of annual meeting of stockholders,--Last Wednesday of September.		
Fiscal year of company ends,--December 31.		
General offices of the company are located at Detroit, Michigan.		

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -	- - - - -	\$250,029 11
Total expenses, including taxes, - - - - -	\$237,306 70	
Net income, - - - - -	- - - - -	12,722 41
Interest on funded debt,—6%, \$65,700 00		
Interest on stock,—4%, - 43,800 00		
	\$109,500 00	
Balance for the year, deficit, - - - - -	96,777 59	
Items not included in above, as follows:		
Contribution from Grand Trunk R'y Co., towards interest liabilities, - - - - -		\$96,777 59

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$1,095,000 00
Par value of shares, - - - - - \$100 00	
No. of shares issued, - - - - - 10,950	
Amount paid in on common, - - - - -	\$978,984 67
Total amount paid in as per books of the company, - - - - -	\$978,984 67
Paid in per mile of road owned by company —59.37 miles, - - - - -	\$18,443 65

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage bonds, July, 1864.....	0%	July, 1884.....	London, Eng.	\$1,095,000 00
Bonds exchangeable for stock within ten years from June 26, 1883, no interest paid.....	5%	.....	.....	691,141 46
Total funded debt.....				\$1,786,141 46

## UNFUNDED DEBT.

Unfunded debt, - - - - -	None.
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## RECAPITULATION.

Total funded debt, - - - - -	\$1,786,141 46
Total debt liabilities, - - - - -	\$1,786,141 46
Amount of debt liabilities per mile of road,—59.37 miles, -	30,084 92
Total amount of stock and debt, - - - - -	\$2,881,141 46
Stock and debt per mile of road, - - - - -	48,528 57

## GENERAL BALANCE SHEET.—Dr.

Construction account, - - - - -	\$2,765,126 13
Operated by the Grand Trunk Railway Company, hence there are no current balances.	
Total, - - - - -	\$2,765,126 13

## GENERAL BALANCE SHEET.—Cr.

Capital stock, - - - - -	\$1,095,000 00
Realized, - - - - -	\$978,984 67
Funded debt, - - - - -	1,786,141 46
Operated by the Grand Trunk Railway Company, hence there are no current balances.	
Total, - - - - -	\$2,765,126 13

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction, - - - - -	\$2,765,126 13
Average cost per mile of road, not including sidings,— 59.37 miles, - - - - -	46,574 46
Proportion of cost for Michigan, - - - - -	2,765,126 13
Equipment furnished by lessees.	

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line:	
Local fares, - - - - -	\$85,053 08
Through fares, - - - - -	44,022 55
Total passenger fares, - - - - -	\$129,075 63
Express and baggage, - - - - -	10,211 04
Mails, - - - - -	9,374 68
Total passenger department earnings, - - - - -	\$148,661 35

Proportion for Michigan,	-	-	-	-	\$148,661	35
Per train mile,	-	-	-	-		55
Per mile of road,	-	-	-	-	2,503	98

## FREIGHT EARNINGS.

Main line:						
Local traffic,	-	-	-	-	\$52,357	02
Through traffic,	-	-	-	-	48,249	44
Total traffic,	-	-	-	-	\$100,606	26
Total freight department earnings,	-	-	-	-		\$100,606 26
Proportion for Michigan,	-	-	-	-	\$100,606	26
Per train mile,	-	-	-	-		37
Per mile of road,	-	-	-	-	1,694	56
Total transportation earnings,	-	-	-	-		249,267 61
Transportation earnings per mile of road,	-	-	-	-	\$4,198	54
Transportation earnings per train mile,	-	-	-	-		93
From rentals of tracks and terminals,	-	-	-	-		761 50
Total earnings from operation of road,	-	-	-	-		250,029 11
Total earnings per mile of road,	-	-	-	-	\$4,211	37
Total earnings per train mile,	-	-	-	-		93
Proportion of taxable earnings for Michigan,	-	-	-	-		250,029 11
Total taxable earnings per mile of road in Michigan,	-	-	-	-	\$4,211	37
Total income from all sources,	-	-	-	-		\$250,029 11
Proportion of income for Michigan,	-	-	-	-		250,029 11

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track,	-	-	-	-	\$23,138	80
Renewals of rails,	-	-	-	-	1,377	02
Renewals of ties,	-	-	-	-	9,323	55
Repairs of bridges, including culverts and cattle guards,	-	-	-	-	3,025	17
Repairs of fences, road crossings, and signs,	-	-	-	-	1,527	76
Repairs of buildings,	-	-	-	-	11,751	43
Total,	-	-	-	-	\$50,143	73

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives,	-	-	-	-	\$24,056	36
Repairs of passenger cars,	-	-	-	-	20,575	99
Repairs of freight cars,	-	-	-	-	19,358	58
Total,	-	-	-	-	\$63,990	93

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	\$19,198 59
Water supply, - - - - -	1,557 30
Oil and waste, - - - - -	1,305 03
Locomotive service, - - - - -	26,065 92
Passenger train service, - - - - -	3,606 83
Passenger train supplies, - - - - -	875 23
Freight train service, - - - - -	7,214 72
Freight train supplies, - - - - -	1,750 57
Mileage of freight cars, - - - - -	3,300 00
Telegraph expenses (maintenance and operating), - - - - -	5,123 50
Damage and loss of freight and baggage, - - - - -	881 69
Damage to property and cattle, - - - - -	260 73
Personal injuries, - - - - -	734 90
Agents and station service, - - - - -	29,198 72
Station supplies, - - - - -	7,503 61
<b>Total, - - - - -</b>	<b>\$108,577 34</b>

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company, - - - - -	\$1,000 00
Salaries of clerks in general offices, - - - - -	2,000 00
Law expenses, - - - - -	1,500 00
Insurance, - - - - -	2,704 45
Stationery and printing, - - - - -	300 00
Outside agencies and advertising, - - - - -	2,000 00
Taxes, - - - - -	5,090 25
<b>Total, - - - - -</b>	<b>\$14,594 70</b>

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - - - -	21.13	\$50,143 73
Maintenance of motive power and cars, - - - - -	26.97	63,990 93
Conducting transportation, - - - - -	45.75	108,577 34
General expenses, including taxes, - - - - -	6.15	14,594 70
<b>Total operating expenses, and taxes, - - - - -</b>	<b>100.00</b>	<b>\$237,306 70</b>
Operating expenses and taxes per mile of road, - - - - -		\$3,977 08
Operating expenses and taxes per train mile run, for trains earning revenue,—267,878 miles, - - - - -	89	
Proportion of operating expenses and taxes for Michigan, main line, - - - - -	237,306 70	
<b>Total proportion of expenses for Michigan, - - - - -</b>		<b>\$237,306 70</b>
Percentage of expenses to earnings, 94.91%.		
Net earnings per mile of road, - - - - -	\$214 29	
Net earnings per train mile - - - - -	04	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Detroit Junction to Fort Gratiot, November, 1859.

## MAIN LINE.

	Miles, 100ths.	Miles, 100ths.
In Michigan, from Detroit Junction to Fort Gratiot,	59.37	
Total length completed,		59.37
Total length of road belonging to this company in Michigan,	59.37	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,		25.85
Aggregate length of tracks in Michigan belonging to this company, computed as single track,		85.22

Gauge of track, 4 feet 8½ inches.

	Total Miles.	In Michigan.
Total miles operated by the company,	59.37	59.37

*Number of Bridges and Trestles in Michigan.*

Iron bridges, number of	6;	aggregate length feet,	792
Total,	6;		792

*Draw Bridges in Michigan.*

How many on your line? One.

Where located, when built, and length of draw span:

Near Port Huron; built 1859; length of swing 123 feet.

Character of structure:

Swing draw.

Material of which constructed:

Iron and stone.

Height above water, and depth of water under bridge:

Sixteen feet from rail to water level; depth of water, 12 feet.

How swung by engine or hand power:

Hand power.

Approaches straight or curved:

Straight.

Do you require all trains to come to a full stop before crossing a draw, and how are they signaled?

Yes; by semaphores.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Detroit, Grand Haven & Milwaukee Railroad, at Detroit.

Detroit & Bay City Railroad, at Detroit.

Chicago & Grand Trunk Railroad, near Port Huron.



Port Huron & North Western Railroad, at Port Huron.

Port Huron & South Western Railroad, at Port Huron.

What railroads cross your road either over or under your grade in this State, and where?

None.

At what crossings are interlocking and derailing switches in operation?

None.

Number of crossings of highways at grade in this State, 90

Number of crossings of highways at grade in this State at which there are gates or flagmen, 4

Are your frogs and guard rails blocked as required by Act 174, Session Laws 1883? Yes.

How are they treated? Filled with wood planking.

#### *Stations.*

Number of stations on whole line, 12

Same in Michigan, 12

#### *Employés.*

Number persons regularly employed on all roads operated by company, including officials, 302

Same in Michigan, 302

Classify your employés as per following list:

	Number.
Baggagemen,	5
Brakemen,	16
Conductors,	11
Engineers,	21
Firemen,	19
Laborers,	81
Shopmen,	1
Yardmen,	25
Others,	123

#### REPAIRS AND RENEWALS.

##### *Fencing in Michigan.*

How many miles of fencing have you? 122.74

##### *Road Bed and Track.*

Number of track sections in Michigan, 13

Average length of sections (miles), 4.50

Average number of men in each section gang, 4

Number of new ties put in whole line during the year, 28,532

Number of new ties put in track in Michigan, 28,532

Average number of new ties per mile of road, 480

#### ROLLING STOCK.

The company does not own any rolling stock. The stock used in working the line belongs to the Grand Trunk Railway Company of Canada.

Number of locomotives equipped with power brakes, All.  
 Number of passenger-train cars equipped with power brakes, All.  
 What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse automatic.  
 Are your freight cars being equipped with automatic couplers as required by Act. No. 147, Session Laws of 1885? Yes.  
 What pattern or patterns have you adopted for use? McCrea's patent coupler.  
 How are your passenger cars heated? Baker heater.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year,	-	-	145,232
Miles run by freight trains during the year,	-	-	80,154
Miles run by mixed trains,	-	-	42,492
Total mileage of trains earning revenue,	-	-	267,878

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried,	29,262		
Number of local passengers carried,	179,339		
Total number of passengers carried,	208,601		
Total passenger mileage, or passengers carried one mile,		4,827,620	
Average distance traveled by each passenger,		23.14	
Average amount received from each passenger,			\$0 62.00
Average rate of fare per mile for through passengers,			02.50
Average rate of fare per mile for local passengers,			02.75
Average rate of fare per mile for all passengers,			02.66

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	93,460		
Number of tons of local freight carried,	221,179		
Total tons of freight carried,	314,639		
Total mileage of through freight,		5,514,140	
Total mileage of local freight,		5,124,870	
Total freight mileage, or tons carried one mile,		10,639,010	
Average ton haul for through freight,			59
Average ton haul for local freight,			23.17
Average ton haul for all freight,			33.81

Average amount received for each ton haul,	\$0 32.000
Average rate per ton per mile, received for through freight,	00.875
Average rate per ton per mile, received for local freight,	01.021
Average rate per ton per mile, received for all freight,	00.945

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	33,596
Flour,	15,866
Provisions (beef, pork, lard, etc.),	4,393
Animals,	2,499
Other agricultural products,	31,006
Lumber and forest products,	36,810
Coal,	18,992
Plaster, lime and cement,	258
Salt,	333
Petroleum,	2,314
Railroad iron, iron and steel rails,	40
Pig and bloom iron,	526
Other iron and castings,	626
Stone, brick and sand,	4,274
Manufactures,—articles shipped from point of production,	20,076
Merchandise and other articles not enumerated above,	53,647
<b>Total forwarded,</b>	<b>225,256</b>

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain,	35,920	11.42
Flour,	15,894	5.05
Provisions (beef, pork, lard, etc.),	4,429	1.41
Animals,	2,822	.90
Other agricultural products,	33,633	10.69
Lumber and forest products,	42,983	13.66
Coal,	27,370	8.70
Plaster, lime and cement,	926	.29
Salt,	379	.12
Petroleum,	3,293	1.05
Railroad iron, iron and steel rails,	40	.01
Pig and bloom iron,	603	.19
Other iron and castings,	955	.30
Stone, brick and sand,	11,167	3.55
Manufactures,—articles shipped from point of production,	45,737	14.54
Merchandise and other articles not enumerated above,	88,488	28.12
<b>Total tons carried,</b>	<b>314,639</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and

do you take their freights at the depot, or at the office of such express companies?

The Canadian Express Company. Fifty per cent of its gross receipts. Freight received at depot.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
59.37 miles belonging to this company.

*Transportation Companies.*

SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Pullman Palace Car Company's cars. No rental paid. The cars are maintained by the railway company. The Pullman company maintain the fittings and collect special fares.

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

The following statement includes payments by the Michigan Air Line Railway Company. They cannot be given separately:

Atlanta Stone, Coal & Lime Line, Atlanta, Georgia,	\$3 37
Armour Refrigerator Line, Chicago, Illinois,	7 64
American Refrigerator Transit Co., St. Louis, Missouri,	9 47
Austell Refrigerator Co., Atlanta, Georgia,	1 34
Arms Palace Horse Car Co., Chicago, Illinois,	4 17
Consolidated Rolling Stock Co., Bridgeport, Connecticut,	35 55
Chicago, Boston & Liverpool Refrigerator Line, Boston, Mass.,	100 59
Columbus & Hocking, Coal & Iron Co., Columbus, Ohio,	81 16
Eagle Consolidated Refining Co., Cleveland, Ohio,	2 34
Fawcett & Co., J. W., Cleveland, Ohio,	2 97
Hammond & Co., G. H., Chicago, Illinois,	3 21
Iron Car Express Line, Philadelphia, Pennsylvania,	51
Merchants' Despatch Transportation Co., New York, N. Y.,	175 75
Michigan Salt Line Car Loan Co., East Saginaw, Mich.,	2 34
Morris & Co., Nelson, Chicago, Illinois,	82
National Car Co., St. Albans, Vermont,	2,762 12
New York Despatch Refrigerator, New York, N. Y.,	157 01
Ohio, Western Coal & Iron Co., Columbus, Ohio,	38 10

Ohio Coal Exchange, Columbus, Ohio,	\$3 87
Southern Iron Car Line, Atlanta, Georgia,	7 12
Somers Coal Co., Columbus, Ohio,	29 06
Street Stable Car Line, Chicago, Illinois,	11 94
Swift Refrigerating Transportation Co., Chicago, Illinois,	45 10
Chicago Refrigerating Car Co., Lafayette, Indiana	36 40
Union Tank Line, New York, N. Y.,	219 39
Total,	\$3,741 34

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

June 17, Peter Reynolds, citizen, Detroit. Tried to cross in front of train at highway crossing; his own fault.

July 7, Walter Green, switchman, Detroit. Run over in yard; accidental.

## INJURED.

March 11, Henry Bowman, trespasser, Fraser. Asleep on track, leg run over.

July 12, Jacob Strespeky, trespasser, Detroit. Struck by train.

October 31, P. Donaghue, yard conductor, Fort Gratiot. Fell under cars while shunting.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.
Collisions.....						
Coupling cars.....						
Derailements.....						
Falling from trains.....						
Frogs.....						
Getting on and off trains.....						
Highway crossings.....			1			
Miscellaneous.....		1			1	
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on tracks.....						2
Total.....		1	1		1	2

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	2
Number of persons injured during the year,	3
Number of casualties purely accidental,	2
Number resulting from lack of caution, carelessness, or misconduct,	1
Persons killed or injured while intoxicated,	
Trespassers and tramps killed or injured,	2
Suicides,	

## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

Employés.	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....			
Conductors.....			
Engineers.....			
Firemen.....			
Laborers.....			
Shopmen.....			
Yardmen.....	1	1	2
Not classified above.....			
Total.....	1	1	2

STATE OF MICHIGAN, }  
COUNTY OF WAYNE, } ss.

W. J. Spicer, General Manager, and James H. Muir, Accountant, of the Chicago, Detroit & Canada Grand Trunk Junction Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

W. J. SPICER.  
JAS. H. MUIR.

Subscribed and sworn to before me this 4th day of April, A. D. 1890.  
A. B. THOMAS, *Notary Public.*

ANNUAL REPORT  
OF THE  
MICHIGAN AIR LINE RAILWAY COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed April 5, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, SIR JOSEPH HICKSON, Montreal, Quebec.  
*Vice President*, A. B. MAYNARD, Romeo, Mich.  
*Secretary*, ROBT. WRIGHT, Montreal, Quebec.  
*Accountant*, JAS. H. MUIR, Detroit, Mich.  
*General Manager*, W. J. SPICER, Detroit, Mich.  
*Superintendent*, A. B. ATWATER, Detroit, Mich.  
*Chief Engineer*, GEORGE MASSON, Detroit, Mich.  
*Attorney*, E. W. MEDDAUGH, Detroit, Mich.

DIRECTORS.

SIR JOSEPH HICKSON, Montreal, Quebec.  
A. B. MAYNARD, Romeo, Mich.  
M. A. McNAUGHTON, Jackson, Mich.  
W. J. SPICER, Detroit, Mich.  
E. W. MEDDAUGH, Detroit, Mich.

Terms expire September, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—November 18, 1875.

Number of stockholders at date of last election,	- - - - -	7
Number of stockholders in Michigan at same date,	- - - - -	4
Amount of full paid stock held in Michigan at same date,	- - - - -	\$2,000
Date of annual meeting of stockholders,—Last Wednesday of September.		
Fiscal year of company ends, December 31.		
General offices of the company are located at Detroit, Mich.		

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income,		\$152,640 45
Total expenses, including taxes,	\$130,574 35	
Net income,		22,066 10
Interest on funded debt,		\$75,433 34
Balance for the year, deficit,	\$53,367 24	
Contribution from Grand Trunk Railway towards interest liabilities,		\$53,367 24
	\$53,367 24	\$53,367 24

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$1,500,000 00
Par value of shares,	\$100
No. of shares issued,	3,000
Amount paid in on common,	\$300,000 00
Total amount paid in, as per books of the company,	\$300,000 00
Paid in per mile of road owned by company, —105.60 miles,	\$2,840 91

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	When Due.	Interest.		Amount.
		Rate.	Payable.	
First mortgage, January, 1882 (\$310,000).....	Jan., 1902.....	5%	London, England..	\$1,508,666 67
Total funded debt.....				\$1,508,666 67

## UNFUNDED DEBT.

Unfunded debt,	None.
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## RECAPITULATION.

Total funded debt,	\$1,508,666 67
Total debt liabilities,	\$1,508,666 67



Amount of debt liabilities per mile of road,—105.60 miles,	\$14,286 61
Total amount of stock and debt,	1,808,666 67
Stock and debt per mile of road,—105.60 miles,	17,127 52

## GENERAL BALANCE SHEET.—DR.

Construction account,	\$176,202 58	
Equipment account,	41,000 00	
		\$1,803,202 58
Other assets:		
Debit balances from companies and individuals,	\$43,298 34	
		43,298 34
Total,		\$1,846,500 92

## GENERAL BALANCE SHEET.—CR.

Capital stock,	\$300,000 00	
Funded debt,	1,508,666 67	
		\$1,808,666 67
Unfunded debt:		
Interest unpaid,	\$37,716 67	
Vouchers and accounts,	117 58	
		37,834 25
Total,		\$1,846,500 92

## COST OF ROAD AND EQUIPMENT.

*Purchased by present company.*

When purchased. November, 1875.

Original cost to present company, of road and equipment,	\$300,000 00
Amount expended since purchase, account of construction,	1,502,202 58
Amount expended since purchase, account of equipment,	1,000 00
Total cost to date of report,	\$1,803,202 58
Average cost per mile of road, not including sidings — 105.6 miles,	17,075 78
Proportion of cost for Michigan,	1,803,202 58

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Land,	\$1,200 00
Ballasting,	10,074 09
New buildings,	1,794 21
Inter-locking signals,	3,323 92
Total,	\$16,392 22

Total charges to property account as above,	\$16,392 22	
Net addition to property account,		<u>\$16,392 22</u>

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line:		
Local fares,	\$31,914 16	
Through fares,	148 72	
Total passenger fares,	<u>\$32,062 88</u>	
Express and baggage,	2,981 15	
Mails,	7,282 52	
Total passenger department earnings,		\$42,326 55
Proportion for Michigan,	\$42,326 55	
Per train mile,	22	
Per mile of road,	400 82	

## FREIGHT EARNINGS.

Main line:		
Local traffic,	\$98,693 90	
Through traffic,	11,620 00	
Total traffic,	<u>\$110,313 90</u>	
Total freight department earnings,		\$110,313 90
Proportion for Michigan,	\$110,313 90	
Per train mile,	59	
Per mile of road,	1,044 63	
Total transportation earnings,		<u>\$152,640 45</u>
Transportation earnings per mile of road,	\$1,445 45	
Transportation earnings per train mile,	81	
Total earnings from operation of road,		<u>\$152,640 45</u>
Total earnings per mile of road,	\$1,445 45	
Total earnings per train mile,	81	
Proportion of taxable earnings for Michigan,		<u>\$152,640 45</u>
Total taxable earnings per mile of road in Michigan,	\$1,445 45	
Total income from all sources,		<u>\$152,640 45</u>
Proportion of income for Michigan,		152,640 45

## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track, . . . . .	\$27,958 75
Renewals of rails, . . . . .	3,643 39
Renewals of ties, . . . . .	8,957 09
Repairs of bridges, including culverts and cattle guards, . . . . .	4,105 34
Repairs of fences, road crossings, and signs, . . . . .	4,353 77
Repairs of buildings, . . . . .	3,599 58
Total, . . . . .	<hr/> \$52,617 92

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives, . . . . .	\$2,817 11
Repairs of passenger cars, . . . . .	2,324 12
Repairs of freight cars, . . . . .	5,173 72
Total, . . . . .	<hr/> \$10,314 95

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, . . . . .	\$12,698 78
Water supply, . . . . .	1,033 60
Oil and waste, . . . . .	405 44
Locomotive service, . . . . .	16,785 35
Passenger train service, . . . . .	3,453 46
Passenger train supplies, . . . . .	397 50
Freight train service, . . . . .	6,907 00
Freight train supplies, . . . . .	795 07
Telegraph expenses (maintenance and operating), . . . . .	2,072 17
Damage and loss of freight and baggage, . . . . .	657 96
Damages to property and cattle, . . . . .	54 87
Personal injuries, . . . . .	528 44
Agents and station service, . . . . .	14,212 64
Station supplies, . . . . .	2,902 89
Total, . . . . .	<hr/> \$62,905 17

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company, . . . . .	\$100 00
Salaries of clerks in general offices, . . . . .	300 00
Law expenses, . . . . .	400 00
Insurance, . . . . .	624 31
Taxes, . . . . .	3,312 00
Total, . . . . .	<hr/> \$4,736 31

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, . . . . .	40.30	\$52,617 92
Maintenance of motive power and cars, . . . . .	7.90	10,314 95
Conducting transportation, . . . . .	48.17	62,905 17
General expenses, including taxes, . . . . .	3.63	4,736 31
Total operating expenses and taxes, . . . . .	100.00	<hr/> \$130,574 35

Operating expenses and taxes per mile of road,	\$1,236	50
Operating expenses and taxes per train mile run, for trains earning revenue,—187,446 miles,		69
Proportion of operating expenses and taxes for Michigan:		
Main line,	130,574	35
Total proportion of expenses for Michigan,		<u>\$130,574 35</u>
Percentage of expenses to earnings,— 85.54%.		
Net earnings per mile of road,	208	96
Net earnings per train mile,		12

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Lenox to Jackson September 1, 1884.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Lenox to Jackson,	105.60	
Total length completed,		<u>105.60</u>
Total length of road belonging to this company,		<u>105.60</u>
Total length of road belonging to this company in Michigan,	105.60	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,	7.44	
Aggregate length of tracks in Michigan belonging to this company computed as single track,		<u>113.04</u>
Gauge of track, 4 feet 8½ inches.		
Total miles operated by the company,	Total Miles. 105.60	In Michigan. 105.60

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of	3;	aggregate length, feet,	239
Wooden trestles, number of	78;	aggregate length, feet,	6,566
Total,	81;		<u>6,805</u>

*Crossings--Railroad and Highway.*

What railroads cross your road at grade in this State and at what locality?

Detroit & Bay City railroad near Rochester.  
 Detroit, Grand Haven & Milwaukee railroad at Pontiac.  
 Flint & Pere Marquette railroad at Wixom.  
 Toledo, Ann Arbor & North Michigan railroad at Hamberg.

Detroit, Lansing & Northern railroad at South Lyon.

Jackson, Lansing & Saginaw railroad near Jackson.

What railroads cross your road either over or under your grade in this State, and where? None.

At what crossings are interlocking and derailing switches in operation?

Jackson, Lansing & Saginaw Division of the Michigan Central railroad at Jackson.

What pattern or patterns have you adopted? Union Switch and Signal Company's.

Number of crossings of highways at grade in this State, 131

Number of crossings of highways at grade in this State at which there are gates or flagmen, 1

Number of crossings at which there are electric or automatic signals, None.

Number of crossings of highways over or under railroad:

Over, --2 Under, None, 2

Number of highway bridges 18 feet above track, 2

Number of highway bridges less than 18 feet above track, None.

Have safety guards been erected at over-head obstructions, Yes.

Are your frog and guard rails blocked as required by act 174, session laws 1883? Yes.

How are they treated? Filled with wood planking.

#### *Stations.*

Number of stations on whole line, 20

Same in Michigan, 20

#### *Employés.*

Number of persons regularly employed on all roads operated by company, including officials, 176

Same in Michigan, 176

Classify your employés as per following list:

	Number.
Baggagemen,	1
Brakemen,	14
Conductors,	9
Engineers,	4
Firemen,	4
Laborers,	92
Shopmen,	1
Yardmen,	1
Others,	50

#### REPAIRS AND RENEWALS.

##### *Fencing in Michigan.*

How many miles of fencing have you? 214

Give the number of miles required to complete fence both sides of your track in Michigan, 1

Total miles required, 1

*Road Bed and Track.*

Number of track sections in Michigan, . . . . .	14
Average length of sections,—miles, . . . . .	7
Average number of men in each section gang, . . . . .	3
Number of new ties put in whole line during the year, . . . . .	37,991
Number of new ties put in track in Michigan, . . . . .	37,991
Average number of new ties per mile of road, . . . . .	361

*Bridges and Culverts.*

Amount of trestle work replaced with earth during the year, . . . . .	795
—linear feet, . . . . .	2
Timber culverts replaced during the year, . . . . .	
With iron pipe,—number, . . . . .	2
New bridges built during the year, . . . . .	None.

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of 20 to 30 tons weight, exclusive of tender, . . . . .	2	\$14,000 00
Total, . . . . .	2	\$14,000 00
Number of passenger cars—8 wheel, including official cars, . . . . .	1	
Number of express and baggage cars, . . . . .	1	3,000 00
Number of box freight cars, . . . . .	18	1,000 00
Number of stock cars, . . . . .		7,200 00
Number of platform cars, . . . . .	4	1,200 00
Total, . . . . .	24	\$26,400 00

Number of locomotives equipped with power brakes, . . . . . 1  
 Number of passenger train cars equipped with power brakes, . . . . . 2  
 Number of freight cars equipped with power brakes,—None.  
 What patterns of power brakes have you in use? Westinghouse automatic.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? McCrea's patent coupler.

How are your passenger cars heated? Baker heater.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year, . . . . .	67,192
Miles run by freight trains during the year, . . . . .	49,068
Miles run by mixed trains, . . . . .	71,186
Total mileage of trains earning revenue, . . . . .	187,446

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Number of through passengers carried,	55		
Number of local passengers carried, -	83,343		
Total number of passengers carried, -	83,398		
Total passenger mileage, or passengers carried one mile, - - - - -		1,106,959	
Average distance traveled by each passenger, -		13.27	
Average amount received from each passenger, -			\$0 38.05
Average rate of fare per mile for through passengers, -			02.50
Average rate of fare per mile for local passengers, -			02.90
Average rate of fare per mile for all passengers, -			02.89

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	13,394		
Number of tons of local freight carried, -	182,908		
Total tons of freight carried, -	196,302		
Total mileage of through freight, - - -		1,420,078	
Total mileage of local freight, -		9,002,224	
Total freight mileage, or tons carried one mile, -		10,422,302	
Average ton haul for through freight, - - -		106	
Average ton haul for local freight, - - -		49	
Average ton haul for all freight, - - -		53	
Average amount received for each ton haul, -			\$0 56.2
Average rate per ton per mile, received for through freight, -			00.80
Average rate per ton per mile, received for local freight, -			01.10
Average rate per ton per mile, received for all freight, -			01.00

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain, - - - - -	19,466
Flour, - - - - -	13,242
Provisions (beef, pork, lard, etc.), - - -	498
Animals, - - - - -	2,533
Other agricultural products, - - - - -	17,524
Lumber and forest products, - - - - -	25,714
Coal, - - - - -	19,984
Plaster, lime and cement, - - - - -	5
Salt, - - - - -	336
Petroleum, - - - - -	60
Railroad iron, iron and steel rails, - - -	24

Other iron and castings, - - - - -	293
Stone, brick and sand, - - - - -	5,170
Manufactures,—articles shipped from point of production, - - - - -	6,597
Merchandise and other articles not enumerated above, - - - - -	34,845
Total forwarded, - - - - -	146,291

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	20,373	10.38
Flour, - - - - -	13,558	6.91
Provisions (beef, pork, lard, etc.), - - - - -	609	.31
Animals, - - - - -	2,636	1.34
Other agricultural products, - - - - -	17,891	9.11
Lumber and forest products, - - - - -	33,147	16.88
Coal, - - - - -	25,919	13.20
Plaster, lime and cement, - - - - -	460	.23
Salt, - - - - -	879	.45
Petroleum, - - - - -	229	.12
Railroad iron, iron and steel rails, - - - - -	64	.03
Pig and bloom iron, - - - - -	96	.05
Other iron and castings, - - - - -	1,017	.52
Stone, brick and sand, - - - - -	5,651	2.88
Manufactures,—articles shipped from point of production, - - - - -	10,690	5.45
Merchandise and other articles not enumerated above, - - - - -	63,083	32.14
Total tons carried, - - - - -	196,302	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company. Terms, \$2,500 per annum for a minimum weight of 3,000 pounds daily carried entire length of road; excess weight at same rate per 100 pounds; freight received at depot.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong? 1,056 miles belonging to this company.

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?



The information cannot be given separate from the Chicago, Detroit & Canada Grand Trunk Junction Railway, and is therefore embraced in the report for that railway.

# REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

Killed, - - - - - None.

## INJURED.

July 11, Homer Green, passenger, Lenox. Getting off train in motion.  
August 8, Joseph Shetello, trespasser, Lenox. Found injured on track.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....						
Deraillments.....						
Falling from trains.....						
Frogs.....						
Getting on and off trains.....				1		
Highway crossings.....						
Miscellaneous.....						
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on track.....						1
Total.....				1		1

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year, - - - - -	—
Number of persons injured during the year, - - - - -	2
Number of casualties purely accidental, - - - - -	—
Number resulting from lack of caution, carelessness, or misconduct, - - - - -	1
Persons killed or injured while intoxicated, - - - - -	—
Trespassers and tramps killed or injured, - - - - -	1
Suicides, - - - - -	—

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....			
Conductors.....			
Engineers.....			
Firemen.....			
Laborers.....			
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....			

STATE OF MICHIGAN, }  
COUNTY OF WAYNE, } ss.

W. J. Spicer, General Manager, and James H. Muir, Accountant, of the Michigan Air Line Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

W. J. SPICER.

JAS. H. MUIR.

Subscribed and sworn to before me this 4th day of April, A. D. 1890.

A. B. THOMAS, *Notary Public.*

ANNUAL REPORT  
OF THE  
CINCINNATI, WABASH & MICHIGAN RAILWAY COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 7, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, D. J. MACKEY, Evansville, Indiana.  
*Vice President*, J. H. WADE, Cleveland, Ohio.  
*Secretary and Treasurer*, W. S. JONES, Cleveland, Ohio.  
*Auditor*, LOUIS B. COOK, Elkhart, Indiana.  
*General Manager*, NORMAN BECKLEY, Elkhart, Indiana.  
*General Superintendent*, O. W. LAMPORT, Wabash, Indiana.  
*Superintendent of Telegraph*, L. J. BUSSARD, Wabash, Indiana.  
*Cashier*, EDGAR S. COOK, Elkhart, Indiana.  
*General Passenger Agent*, EDGAR H. BECKLEY, Elkhart, Indiana.  
*General Freight Agent*, DARWIN F. COE, Elkhart, Indiana.  
*Attorneys*, COWGILL, SHIRELY & COWGILL, Wabash, Indiana.

DIRECTORS.

D. J. MACKEY, Evansville, Indiana.  
WM. HILEMAN, Evansville, Indiana.  
C. P. LELAND, Cleveland, Ohio.  
W. S. JONES, Cleveland, Ohio.  
J. H. WADE, Cleveland, Ohio.  
J. H. WADE, JR., Cleveland, Ohio.  
JOHN NEWELL, Cleveland, Ohio.  
C. COWGILL, Wabash, Indiana.  
NORMAN BECKLEY, Elkhart, Indiana.  
C. C. BALDWIN, Evansville, Indiana.

Terms expire April, 1890.

## STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—Reorganization, April 14, 1880.

Number of stockholders at date of last election, - - - - - 40

Number of stockholders in Michigan at same date, - - - - - 3

Amount of full paid stock held in Michigan at same date, - - - - \$4,000 00

Date of annual meeting of stockholders,—Second Wednesday in April.

Fiscal year of company ends December 31.

General offices of the company are located at Elkhart, Indiana.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -	- - - - -	\$534,062 59
Total expenses, including taxes, - - - - -	\$377,613 93	
Net income, - - - - -	- - - - -	156,448 66
Interest on funded debt, - - - - -	\$45,224 59	
Interest on unfunded debt, - - - - -	591 06	
	\$45,815 67	
Profit and loss, - - - - -	- - - - -	\$1 20
Balance applicable to dividends, - - - - -	- - - - -	110,634 21
Balance for the year, - - - - -	- - - - -	\$110,634 21
Balance (profit and loss) last year, - - - - -	- - - - -	389,680 75
Balance forward to next year, - - - - -	\$500,314 96	
	\$500,314 96	\$500,314 96

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, No fixed Amount.

Par value of shares, - - - - \$100 00  
 Number of shares issued, - - - - 20,433  
 Amount paid in on common, - - - - \$2,044,058 76

Total amount paid in as per books of the company, - - - - \$2,044,058 76

Paid in per mile of road owned by company,  
 —164.4 miles, - - - - \$12,434 05

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount Outstanding.
First mortgage.....	5%	1912.....	Cleveland, O.	\$812,379 30
Additional notes issued for interest on above	5%	Due and unpaid.	Cleveland, O.	73,903 71
Total funded debt.....				\$886,373 00

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For construction.....		
For equipment.....		
For real estate.....		
For renewals.....		
For miscellaneous.....		
For current balances.....		\$83,273 30
Total unfunded debt.....		\$83,273 30

## RECAPITULATION.

Total funded debt,	\$886,373 00
Total unfunded debt,	83,273 30
Total debt liabilities,	\$969,646 30
Amount of debt liabilities per mile of road,—164.4 miles,	5,898 09
Total amount of stock and debt,	\$3,013,705 06
Stock and debt per mile of road,—164.4 miles,	18,331 54

## GENERAL BALANCE SHEET.—DR.

Construction and equipment account,	\$3,429,226 69	
Other investments, specifying same:		
Rushville extension,	14,489 33	
Interstate dispatch,	200 00	
Warsaw Implement Co.,	1,281 38	
		\$3,445,197 40
Cash items:		
Cash,	\$34,091 20	
Bills receivable,	1,300 00	
Due from agents,	21,558 54	
		56,949 74

## Other assets:

Materials and supplies, - - - - -	\$53,567 59	
Debit balances from companies and individuals, - - - - -	33,223 42	\$86,791 01
		<hr/>
Total, - - - - -		\$3,588,938 15

## GENERAL BALANCE SHEET.—Cr.

Capital stock, - - - - -	\$2,044,058 76	
Funded debt, - - - - -	886,373 00	
Benton Harbor subsidies, - - - - -	74,915 13	
Jonesboro extension, - - - - -	3 00	
		<hr/>
		\$3,005,349 89
Unfunded debt:		
Other liabilities (list as follows):		
Including December vouchers and pay rolls, - - - - -		83,273 30
Profit and loss or income accounts, - - - - -		500,314 96
		<hr/>
Total, - - - - -		\$3,588,938 15

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment, - - - - -	\$3,429,226 69
Average cost per mile of road, not including sidings,—164.4 miles, - - - - -	20,857 70
Proportion of cost for Michigan, - - - - -	696,647 18

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings, - - - - -	\$26,040 11
Real estate, - - - - -	2,358 20
New buildings, - - - - -	4,619 69
Telegraph line, - - - - -	421 76
Machinery and tools, - - - - -	1,959 59
New locomotives, - - - - -	15,602 12
New cars, - - - - -	46,340 75
	<hr/>
Total charges, - - - - -	\$97,342 22
Total charges to property account as above, - - - - -	97,342 22
	<hr/>
Net addition to property account, - - - - -	\$97,342 22

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

## Main line and branches:

Local fares, - - - - -	\$200,766 32
Through fares, - - - - -	5,705 78
	<hr/>
Total passenger fares, - - - - -	\$206,472 10

Express and baggage, . . . . .	\$11,173 61	
Mails, . . . . .	12,421 32	
Total passenger department earnings, . . . . .		\$230,067 03
Proportion for Michigan, . . . . .	\$46,740 96	
Per train mile, . . . . .	74	
Per mile of road, . . . . .	1,399 43	

## FREIGHT EARNINGS.

<b>Main line and branches:</b>		
Local traffic, . . . . .	\$245,173 45	
Through traffic, . . . . .	51,048 88	
Total traffic, . . . . .	\$296,222 33	
Other sources, . . . . .	7,773 23	
Total freight department earnings, . . . . .		\$303,995 56
Proportion for Michigan, . . . . .	\$61,760 61	
Per train mile, . . . . .	1 38	
Per mile of road, . . . . .	1,849 12	
Total transportation earnings, . . . . .		\$534,062 59
Transportation earnings per mile of road, . . . . .	\$3,248 55	
Transportation earnings per train mile, . . . . .	1 00	
Total earnings from operation of road, . . . . .		534,062 59
Total earnings per mile of road, . . . . .	\$3,248 55	
Total earnings per train mile, . . . . .	1 00	
Proportion of taxable earnings for Michigan, . . . . .		108,501 57
Total taxable earnings per mile of road in Michigan, . . . . .	\$3,248 55	
Total income from all sources, . . . . .		\$534,062 59
Proportion of income for Michigan, . . . . .		108,501 57

## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track, . . . . .	\$41,701 59
Renewals of rails . . . . .	21,000 00
Renewals of ties . . . . .	17,755 57
Repairs of bridges, including culverts and cattle guards, . . . . .	15,465 91
Repairs of fences, road crossings and signs, . . . . .	3,217 83
Repairs of buildings, . . . . .	7,007 67
Total, . . . . .	\$106,148 57

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives, - - - - -	\$24,195 95
Repairs of passenger cars, - - - - -	11,740 08
Repairs of freight cars, - - - - -	13,367 30
Total, - - - - -	<u>\$49,303 33</u>

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	\$53,460 27
Water supply, - - - - -	1,598 21
Oil and waste, - - - - -	3,976 66
Locomotive service, - - - - -	34,691 52
Passenger train service, - - - - -	9,239 78
Passenger train supplies, - - - - -	669 99
Freight train service, - - - - -	18,670 57
Freight train supplies, - - - - -	322 71
Telegraph expenses (maintenance and operating), - - - - -	6,448 77
Damage and loss of freight and baggage, - - - - -	497 42
Damages to property and cattle, - - - - -	548 32
Personal injuries, - - - - -	8 50
Agents and station service, - - - - -	25,473 19
Station supplies, - - - - -	1,069 99
Total, - - - - -	<u>\$156,675 90</u>

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company, - - - - -	\$18,196 49
Salaries of clerks in general offices, - - - - -	10,032 74
Law expenses, - - - - -	4,041 55
Stationery and printing, - - - - -	5,078 18
Outside agencies and advertising, - - - - -	8,684 62
Contingencies, - - - - -	3,937 58
Taxes, - - - - -	15,514 77
Total, - - - - -	<u>\$65,485 93</u>

## RECAPITULATION OF EXPENSES.

	Per cent of Expenses.	
Maintenance of way and buildings, - - - - -	28.16	\$106,148 57
Maintenance of motive power and cars, - - - - -	13.01	49,303 33
Conducting transportation, - - - - -	41.49	156,675 90
General expenses, including taxes, - - - - -	17.34	65,485 93
Total operating expenses and taxes, - - - - -	100.00	<u>\$377,612 83</u>
Operating expenses and taxes per mile of road, - - - - -	\$2,296 92	
Operating expenses and taxes per train mile run, for trains earning revenue,—530,029 miles, - - - - -	71 24	
Proportion of operating expenses and taxes for Michigan:		
Main line, - - - - -	76,717 13	
Total proportion of expenses for Michigan, - - - - -		<u>\$76,717 13</u>



Percentage of expenses to earnings,—70.70.

Net earnings per mile of road, - - - \$951 63

Net earnings per train mile, - - - 29.52

#### DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Anderson, Indiana, to Goshen, Indiana, May 21, 1876.

From Goshen, Indiana, to Benton Harbor, Michigan, November 13, 1882.

#### MAIN LINE.

	Miles, 100ths.	Miles, 100ths.
In Michigan, from State Line to Benton Harbor, -	33.40	
In Indiana, from State Line, to Anderson, -	131.00	
Total length completed, - - - -		164.40
Total length of road belonging to this company, - -		164.40
Total length of road belonging to this company in Michigan, - - - -	33.40	
Aggregate length in Michigan, of sidings, spurs, and other tracks not above enumerated, - -	7.60	
Aggregate length of tracks in Michigan belong- ing to this company, computed as single track, -		41.00

Gauge of track, 4 feet 8½ inches.

	Total Miles.	In Michigan.
Total miles operated by the company, - - -	164.40	33.40

#### Number of Bridges and Trestles in Michigan.

Wooden bridges, number of - 1;	aggregate length, feet, -	60
Wooden trestles, number of, - 2;	aggregate length, feet, -	555
Total, - - - - 3;		615

#### Crossings—Railroad and Highway.

What railroads cross your road at grade in this State, and at what locality?  
None.

What railroads cross your road either over or under your grade in this State, and where?

Over,—Michigan Central Railroad at Niles, Main Line.

Over,—Michigan Central Railroad at Niles, South Bend Division.

Number of crossings of highways at grade in this State, 43

Number of crossings of highways at grade in this State  
at which there are gates or flagmen, - - - 2

Number of crossings at which there are electric or  
automatic signals, - - - None.

What pattern or patterns in use? - - - None.

Number of crossings of highways over or under railroad:

Over,—1. Under,—1, - - - 2

Number of highway bridges 18 feet above track, - - - 1

Number of highway bridges less than 18 feet above track,	1
Have safety guards been erected at over-head obstructions,	Yes.
Are your frogs and guard rails blocked as required by act 174, session laws of 1883,	Yes.
How are they treated? No report.	

*Stations.*

Number of stations on whole line,	40
Same in Michigan,	8

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials,	410
Same in Michigan,	41

Classify your employ  s as per following list:

	Number.
Baggagemen,	5
Brakemen,	18
Conductors,	12
Engineers,	19
Firemen,	19
Laborers,	124
Shopmen,	95
Yardmen,	6
Others,	112

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?	66
-------------------------------------	----

Give the number of miles required to complete fence both  
sides of your track, in Michigan, and the counties in which  
needed.  
All fenced.

*Road Bed and Track.*

Number of track sections in Michigan,	6
Average length of sections,—miles,	6
Average number of men in each section gang,	3
Number of new ties put in whole line during the year,	36,554
Number of new ties put in track in Michigan,	7,255
Average number of new ties per mile of road,	217

*Bridges and Culverts.*

Amount of trestle work replaced with earth during year, —linear feet,	275
New bridges built during the year,—number,	3

Location.	Kind.	Material.	Month Built.	Feet in Length.
Elkhart.....	Howe truss.....	Wood.....		120
Goehen.....	Howe truss.....	Wood.....		80
Wabash.....	Howe truss.....	Wood.....		600
Total.....				800

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender,	16	\$80,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	7	21,000 00
Total, - - - - -	23	\$101,000 00
Number of passenger cars—8-wheel, including official cars, - - - - -	16	44,800 00
Number of express and baggage cars, including 4 combination cars, - - - - -	8	16,000 00
Number of box freight cars, - - - - -	485	169,750 00
Number of stock cars, - - - - -	18	5,400 00
Number of platform and coal cars, - - - - -	203	40,600 00
Number of conductors' way cars, - - - - -	11	5,500 00
Other cars, - - - - -	3	3,000 00
(1 tool car, 1 snow plow, 1 pile driver.)		
Total, - - - - -	744	\$385,050 00

Number of locomotives equipped with power brakes, - - - - -	23
Number of passenger-train cars equipped with power brakes, - - - - -	24
Number of freight cars equipped with power brakes, - - - - -	None.

What patterns of power brakes have you in use, and number of locomotives and cars with each? All Eames' vacuum brake, except one locomotive equipped with American brake.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? Blocker.

How are your passenger cars heated? McElroy car heating system; steam supplied from locomotive.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year, - - -	309,762
Miles run by freight trains during the year, - - -	220,267
Total mileage of trains earning revenue, - - -	530,029

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.	
Number of through passengers carried,	1,720			
Number of local passengers carried,	340,644			
Total number of passengers carried,	342,364			
Total passenger mileage, or passengers carried one mile,		8,560,949		
Average distance traveled by each passenger,		25		
Average amount received from each passenger,			\$0	60.30
Average rate of fare per mile for through passengers,				02.00
Average rate of fare per mile for local passengers,				02.40
Average rate of fare per mile for all passengers,				02.40

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.	
Number of tons of through freight carried,	44,624			
Number of tons of local freight carried,	330,303			
Total tons of freight carried,	374,927			
Total mileage of through freight,		7,186,497		
Total mileage of local freight,		14,745,342		
Total freight mileage, or tons carried one mile,		21,931,839		
Average ton haul for through freight,		165		
Average ton haul for local freight,		44.6		
Average ton haul for all freight,		58.5		
Average amount received for each ton haul,				00.78
Average rate per ton per mile received for through freight,				00.71
Average rate per ton per mile, received for local freight,				01.66
Average rate per ton per mile, received for all freight,				01.35

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	1,544
Flour,	6,116
Provisions (beef, pork, lard, etc.),	655
Animals,	153
Other agricultural products,	2,520
Lumber and forest products,	71,284
Coal,	65
Plaster, lime and cement,	69
Salt,	1,423
Petroleum,	17
Pig and bloom iron,	3,039
Other iron and castings,	126
Stone, brick and sand,	35
Manufactures,—articles shipped from point of production,	1,151
Merchandise and other articles not enumerated above,	13,367
Total forwarded,	101,564

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	31,643	8.439
Flour, - - - - -	15,258	4.068
Provisions (beef, pork, lard, etc.), - - -	6,219	1.659
Animals, - - - - -	11,521	3.073
Other agricultural products, - - - - -	9,305	2.215
Lumber and forest products, - - - - -	126,949	33.326
Coal, - - - - -	22,529	6.006
Plaster, lime and cement, - - - - -	6,160	1.634
Salt, - - - - -	2,178	.580
Petroleum, - - - - -	9,731	2.595
Railroad iron, iron and steel rails, - - -	1,727	.460
Pig and bloom iron, - - - - -	3,879	1.033
Other iron and castings, - - - - -	14,913	3.977
Ores, - - - - -	43	.011
Stone, brick and sand, - - - - -	22,947	6.140
Manufactures,—articles shipped from point of production, - - - - -	29,606	7.896
Merchandise and other articles not enumerated above, - - - - -	60,319	16.888
Total tons carried, - - - - -	374,927	100.000

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

United States Express Company; contract \$11,000 per year; daily limit 4,000 pounds, through freight 65 cents per hundred pounds, for through freight in excess of that amount; freight delivered at our stations.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

165 miles wire owned by Western Union Telegraph Company.

287 miles wire owned by Cincinnati, Wabash & Michigan Railway Co.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED. •

October 3, Philip Gemberling, brakeman, Benton Harbor. Caught foot in frog, by his own carelessness, in violation of the positive rules of this company.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.
Collisions.....						
Coupling cars.....					1	
Derailments.....						
Falling from trains.....						
Frogs.....		1				
Getting on and off trains.....						
Highway crossings.....						
Miscellaneous.....					1	
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on tracks.....						
Total.....		1			2	

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	-	-	-	-	-	1
Number of persons injured during the year,	-	-	-	-	-	2
Number of casualties purely accidental,	-	-	-	-	-	—
Number resulting from lack of caution, carelessness, or misconduct,	-	-	-	-	-	2
Persons killed or injured while intoxicated,	-	-	-	-	-	—
Trespassers and tramps killed or injured,	-	-	-	-	-	—
Suicides,	-	-	-	-	-	—

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....	1	2	3
Conductors.....			
Engineers.....			
Firemen.....			
Laborers.....			
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....	1	2	3

STATE OF INDIANA, }  
COUNTY OF ELKHART, } ss.

Norman Beckley, General Manager, and Louis B. Cooke, Auditor, of the Cincinnati, Wabash & Michigan Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed, NORMAN BECKLEY. *Gen'l M'g'r.*  
LOUIS B. COOKE, *Auditor.*

Subscribed and sworn to before me this 4th day of April, A. D. 1890.

CHARLES W. FISH,  
*Commissioner of Deeds for Michigan in Indiana.*

ANNUAL REPORT  
OF THE  
MILWAUKEE, LAKE SHORE & WESTERN RAILWAY  
COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 7, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, F. W. RHINELANDER, New York.  
*Asst. to the President* F. W. RHINELANDER, JR., Milwaukee, Wis.  
*Vice President*, JOSEPH R. BUSK, New York.  
*Secretary*, ALFRED L. CARY, Milwaukee, Wis.  
*Auditor*, W. R. HANCOCK, Milwaukee, Wis.  
*Treasurer*, GORDON NORRIE, New York.  
*General Manager*, H. F. WHITCOMB, Milwaukee, Wis.  
*General Superintendent*, GEO. F. BIDWELL, Milwaukee, Wis.  
*Division Superintendents*, { W. H. VANDEGRIFT, Kaukauna, Wis.  
                                   { C. H. HARTLEY, Ashland, Wis.  
*Chief Engineer*, E. H. RUMMELE, Milwaukee, Wis.  
*Superintendent of Telegraph*, H. C. REED, Milwaukee, Wis.  
*Asst. Treasurer*, A. D. ALLIBONE, Milwaukee, Wis.  
*General Passenger Agent*, ERNEST VLIET, Milwaukee, Wis.  
*General Freight Agent*, C. L. WELLINGTON, Milwaukee, Wis.  
*General Solicitor*, ALFRED L. CARY, Milwaukee, Wis.

DIRECTORS.

F. F. THOMPSON, New York.  
 GORDON NORRIE, New York.  
 JOSEPH R. BUSK, New York.  
 CHAS. LULING, Manitowoc, Wis.

Terms expire June, 1890.

F. W. RHINELANDER, New York.  
 WM. H. REESE, New York.  
 W. K. HINMAN, New York.  
 D. PARRISH, Philadelphia, Pa.  
 SAMUEL S. SANDS, New York.

Terms expire June, 1891.



THEO. M. DAVIS, Newport, R. I.  
 CHAS. DANA, New York.  
 JOSEPH VILAS, Manitowoc, Wis.  
 JAMES H. MEAD, Sheboygan, Wis.

Terms expire June, 1892.

### STOCKHOLDERS, STOCK AND GENERAL OFFICES.

\*When chartered or articles of association filed.

Number of stockholders at date of last election, - - - - - 356

Date of annual meeting of stockholders,—Second Wednesday in June.

Fiscal year of company ends,—December 31.

General offices of the company are located at Milwaukee, Wis.

### REMARKS.

\*The articles of association of the Vieux Desert and Lake Superior Railroad Company, were filed in the office of the Secretary of State of the State of Michigan, September 28, 1881. This company was afterward consolidated with the Milwaukee, Lake Shore and Western Railway Company, a corporation of the State of Wisconsin, under articles filed in the office of said Secretary of State, on the 4th day of May 1883. The name of the consolidated company being Milwaukee, Lake Shore and Western Railway Company.

### GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$3,474,669 29
Total expenses, including taxes, - - - - -	\$1,954,203 97	
Net income, - - - - -		\$1,520,463 32
Interest on funded debt, - - - - - \$671,499 39		
Rentals of buildings, tracks, etc., - - - - - 31,763 57		
Bonds redeemed, - - - - - 55,000 00		
	\$758,262 96	
Balance applicable to dividends, - - - - -		276,200 36
Dividends declared, 7%, preferred, \$350,000 00		
Dividends declared, 7%, common, 140,000 00		
	\$490,000 00	
Balance for the year, - - - - -		\$272,200 36
Balance (profit and loss) last year, - - - - -		194,927 82
Items not included in above as follows:		
Sales of lands, town lots, etc., - - - - -		15,293 93
Balance forward to next year, - - - - -	\$482,422 11	
	\$482,422 11	\$482,422 11

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$10,000,000 00
Par value of shares, - - - - -	\$100 00
Number of shares issued, - - - - -	70,000
Amount paid in on common, - - - - -	\$2,000,000 00
Amount paid in on preferred, - - - - -	5,000,000 00
Total amount paid in, as per books of the company,	\$7,000,000 00
Paid in per mile of road owned by company,—650.50 miles, - - - - -	\$10,760 95

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
Consolidated first mortgage.....	6%	May and November	New York.....	\$5,000,000
Michigan Division, first mortgage.....	6%	January and July	New York.....	1,281,000
Ashland Division, first mortgage.....	6%	March and Sept.	New York.....	1,000,000
Hurley & Ontonagon river branches, 1st m't'g..	6%	April and October	New York.....	175,000
Equipment of 1882.....	3%	January and July	New York.....	90,000
Equipment of 1885.....	6%	January and July	New York.....	500,000
Convertible debentures of 1907.....	5%	February and Aug.	New York.....	1,142,000
Extension and improvement S. F. mortgage.....	5%	February and Aug.	New York.....	1,608,000
Income bonds.....	6%	May and November	New York.....	500,000
Total funded debt.....				\$11,296,000

## UNFUNDED DEBT.

For what Incurred.	Is the Same to be Funded, or How Liquidated.	Amount.
For construction.....	Current vouchers, to be paid in cash..... December pay rolls..... Unpaid labor uncalled for.....	\$128,778 34
For equipment.....		87,881 25
For real estate.....		5,558 74
For renewals.....		
For miscellaneous.....		
For current balances.....		
Total unfunded debt.....		\$222,208 33

## RECAPITULATION.

Total funded debt,	\$11,296,000 00
Total unfunded debt,	222,208 33
Total debt liabilities,	\$11,518,208 33
Amount of debt liabilities per mile of road,—650.5 miles,	17,706 69
Total amount of stock and debt,	\$18,518,208 33
Stock and debt per mile of road,—650.5 miles,	28,467 64

## GENERAL BALANCE SHEET.—Dr.

Construction and equipment account, - - -	\$19,198,446 92
Other investments:	
Sundry stocks and bonds, - - -	222,000 00
Cash items:	
Cash, - - - - -	\$238,890 98
Bills receivable, - - - - -	2,400 00
Due from agents, - - - - -	84,467 35
	<hr/>
	325,758 33
Other assets:	
Materials and supplies, - - -	\$203,726 67
Debit balances from companies and individuals, - - - - -	168,316 39
	<hr/>
	372,043 06
Total, - - - - -	<hr/>
	\$20,118,248 31

## GENERAL BALANCE SHEET.—Cr.

Capital stock, - - - - -	\$7,000,000 00
Funded debt, - - - - -	11,296,000 00
Accrued interest not yet due, - - -	217,617 87
Dividends payable Feb. 15, 1890, - -	315,000 00
Redeemed bonds, - - - - -	585,000 00
	<hr/>
	\$19,413,617 87
Unfunded debt:	
Vouchers and accounts, - - - - -	128,773 34
Other liabilities:	
December pay roll, - - - - -	87,881 25
Unpaid labor, uncalled for, - - -	5,553 74
	<hr/>
	222,208 33
Profit and loss or income accounts, - - -	482,422 11
	<hr/>
Total, - - - - -	\$20,118,248 31

## COST OF ROAD AND EQUIPMENT.

*Purchased by Present Company.*

When purchased,—December 11, 1875.

Original cost to present company of road and equipment,	\$6,361,224 97
Amount expended since purchase, account of construction,	9,940,717 87
Amount expended since purchase, account of equipment,	2,896,504 08
Total cost to date of report, - - -	19,198,446 92
Average cost per mile of road not including sidings, —650.52 miles,	29,512 46
Proportion of cost for Michigan,—101.28 miles, - - -	2,989,021 95

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings, - - -	\$561,510 93	
Right of way, station grounds, - - -	27,206 13	
New buildings, - - - - -	36,463 39	
New Fences, - - - - -	9,965 58	
Machinery and tools, - - - - -	5,536 54	
New bridges, - - - - -	15,420 32	
New cars, - - - - -	313,797 09	
	<hr/>	\$969,899 98

## BRANCHES.

Pence branch, - - - - -	\$13,639 24	
Wolf and Wisconsin rivers branch, - - -	14,187 17	
Ontonagon river branch, - - - - -	5,556 13	
Mining tracks and sidings, - - - - -	15,788 06	
Spurs to mills, main line, - - - - -	54,373 89	
New side tracks, main line, - - - - -	47,044 37	
New telegraph, main line, - - - - -	3,918 88	
New docks, main line, - - - - -	2,265 30	
Miscellaneous improvements on main line and yards, - - - - -	42,569 99	
	<hr/>	199,342 13
Total charges to property account, - - -		\$1,169,242 11
Property sold and credited, - - - - -		3,600 00
		<hr/>
Net addition to property account, - - -		\$1,165,642 11
Less balance of premium on securities, - - -		17,920 00
		<hr/>
Total to cost of road and equipment, - - -		\$1,147,722 11

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Roads.	Local Fares.	Through Fares.	Total Passenger Fares.	Express and Baggage.	Mails.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile. of Road.
Main line and branches.....	\$466,940 99	\$86,642 81	\$553,582 90	\$45,757 44	\$48,498 96	\$646,817 29	\$108,922 54	\$0 80.2	\$1,028 08
<i>Leased or Proprietary Roads.</i>									
St. Paul, Eastern Grand Trunk Railway.....	16,812 05	1,604 10	18,416 75	4,554 64	2,765 99	25,737 38		50.8	445 48
Chicago & Northwestern Railway.....	6,562 17	1,158 01	7,720 18	270 00	492 00	8,462 18		87.3	2,356 16
Total passenger department earnings.....	\$480,315 41	\$88,404 42	\$578,719 83	\$50,562 08	\$51,754 94	\$681,086 85	\$108,922 54	\$0 78.6	\$984 51

## FREIGHT EARNINGS.

Roads.	Local Traffic.	Through Traffic.	Total Traffic.	Other Sources.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile. of Road.
Main line and branches.....	\$1,579,882 86	\$1,199,541 52	\$2,779,524 37	\$384 50	\$2,789,868 87	\$440,208 40	\$1 86	\$4,846 43
<i>Leased or Proprietary Roads.</i>								
St. Paul, Eastern Grand Trunk Railway.....	14,996 54	12,275 43	27,170 97		27,170 97		68	487 55
Chicago & Northwestern.....	10,247 80	16,853 80	26,600 60		26,600 60		1 99	7,890 55
Total freight department earnings.....	\$1,605,125 69	\$1,188,170 25	\$2,793,335 94	\$384 50	\$2,798,680 44	\$440,208 40	\$1 83	\$4,088 46

Total transportation earnings,	-	-	-	\$3,474,667	29
Transportation earnings per mile of road,	\$5,023	01			
Transportation earnings per train mile,		1	45		
Total earnings from operation of road,	-	-	-	\$3,474,667	29
Total earnings per mile of road,	\$5,023	01			
Total earnings per train mile,		1	45		
Proportion of taxable earnings for Michigan,	-	-	-	544,128	94
Total taxable earnings per mile of road in Michigan,	-	-	-		
Income other than from earnings,	\$5,372	51		15,293	93
Total income from all sources,	-	-	-	\$3,489,961	22
Proportion of income for Michigan,	-	-	-	546,001	58

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track,	-	-	-	\$299,737	81
Renewals of rails,	-	-	-	56,443	70
Renewals of ties,	-	-	-	57,124	81
Repairs of bridges, including culverts and cattle guards,	-	-	-	31,348	76
Repairs of fences, road crossings, and signs,	-	-	-	11,204	13
Repairs of buildings,	-	-	-	25,656	06
Total,	-	-	-	\$481,515	27

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives,	-	-	-	\$76,919	51
Repairs of passenger cars,	-	-	-	25,894	22
Repairs of freight cars,	-	-	-	113,158	71
Total,	-	-	-	\$215,972	44

## CLASS 3.—Conducting Transportation.

Fuel for locomotives,	-	-	-	\$282,046	16
Water supply,	-	-	-	12,504	22
Oil and waste,	-	-	-	16,327	96
Locomotive service,	-	-	-	220,779	28
Passenger train service,	-	-	-	47,509	39
Passenger train supplies,	-	-	-	6,409	22
Freight train service,	-	-	-	160,758	70
Freight train supplies,	-	-	-	4,169	97
Mileage of freight cars,	-	-	-	4,001	24
Telegraph expenses (maintenance and operating),	-	-	-	36,445	96
Damage and loss of freight and baggage,	-	-	-	4,739	37
Damages to property and cattle,	-	-	-	6,915	90
Personal injuries,	-	-	-	9,838	91
Agents and station service,	-	-	-	119,041	64
Station supplies,	-	-	-	12,347	12
Total,	-	-	-	\$943,835	04

## CLASS 4.—General Expenses.

Salaries of the general officers of the company,	-	-	-	\$48,900 00
Salaries of clerks in general offices,	-	-	-	32,219 06
Law expenses,	-	-	-	17,976 18
Insurance,	-	-	-	11,556 55
Stationery and printing,	-	-	-	17,176 67
Outside agencies and advertising,	-	-	-	35,082 85
Contingencies,	-	-	-	40,733 61
Taxes,	-	-	-	109,236 30
Total,	-	-	-	<u>\$312,881 22</u>

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings,	24.64	\$481,515 27
Maintenance of motive power and cars,	11.05	215,972 44
Conducting transportation,	48.30	943,835 04
General expenses, including taxes,	16.01	312,881 22
Total operating expenses, and taxes,	100.00	<u>\$1,954,203 97</u>
Operating expenses and taxes per mile of road,		\$2,825 07
Operating expenses and taxes per train mile run, for trains earning revenue,—2,392,775 miles,	81.7	
Proportion of operating expenses and taxes for Michigan, main line,	279,543 34	
Total proportion of expenses for Michigan,		<u>\$279,543 34</u>
Percentage of expenses to earnings, 56.24%.		
Net earnings per mile of road,	\$2,197 93	
Net earnings per train mile	63.54	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Lake Shore Junction to Ashland, 1885.  
 From Two Rivers Junction to Two Rivers, 1874.  
 From Hortonville Junction to Oshkosh, 1880.  
 From Eland Junction to Wausau, 1880.  
 From Antigo Junction to end of track, 1883.  
 From Monico Junction to Rhinelander, 1882.  
 From Rhinelander to Lac Du Flambeau, 1888.  
 From Lac Du Flambeau to Van Buskirk, 1889.  
 From Van Buskirk to Hurley, 1888.  
 Hurley Branch, 1886.  
 Ontonagon River Branch, 1887.  
 From Oconto to Clintonville, 1884.  
 Wolf & Wisconsin Rivers Branch, 1888.

## MAIN LINE.

	Miles, 100ths.	Miles, 100ths.
In Michigan, from State Line to Montreal River, -	66.89	
In Wisconsin, from Lake Shore Junction to State Line, -	279.87	
In Wisconsin, from Montreal River to Ashland, -	39.62	
In Wisconsin, from Monico to Hurley, -	88.13	
Total length completed, - - - - -		474.51

## BRANCHES.

In Wisconsin, from Two Rivers Junction to Two Rivers, -	6.35	
In Wisconsin, from Hortonville to Oshkosh, -	23.10	
In Wisconsin, from Eland Junction to Wausau, -	23.20	
In Wisconsin, from Antigo Junction to end of track, -	11.92	
In Wisconsin, from Pratt Junction to end of track, -	22.39	
In Wisconsin, from Hurley Junction to end of track, -	16.91	
*In Wisconsin, from spurs and branches to mines and mills, -	37.75	
In Michigan, from Watersmeet to end of track, -	11.97	
In Michigan, from spurs and branches to mines and mills, -	22.42	
Total length of branches owned by company, -		176.01
Total length of branches owned by company in Michigan, -	34.39	
Total length of road belonging to this company, -		650.52
Total length of road belonging to this company in Michigan, -	101.28	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated, -		25.71
Aggregate length of tracks in Michigan belonging to this company, computed as single track, -		126.99
Gauge of track, 4 feet 8½ inches.		

*Proprietary or Leased Roads Operated by this Company.*

Name, description and length of each:

	Total Miles.	In Michigan.
C. & N. W. R'y Milwaukee to Lake Shore Junction, -	3.60	
St. P. E. G. T. R'y Clintonville to Oconto, -	56.00	
St. P. E. G. T. R'y Spurs, - - - - -	1.78	
Total, - - - - -	61.38	
Total miles operated by the company, - - -	691.75	101.28

\*20.15 miles of spurs in Wisconsin owned by this company, are leased to other parties engaged in manufacturing.



*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of	7; aggregate length, feet,	439
Wooden trestles, number of	26; aggregate length, feet,	3,052
Total,	33;	3,491

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?  
Chicago & Northwestern Railroad at Watersmeet.

What railroads cross your road either over or under your grade in this State, and where?

Over,—

Duluth, S. S. & Atlantic Railroad at one mile west of Bessemer.

Gogebic & Montreal River Railroad at Siemens.

Gogebic & Montreal River Railroad at Ironwood.

Under,—None.

At what crossings are interlocking and derailing switches in operation?  
None. ☐

Number of crossings of highways at grade in this State, 17

Number of crossings of highways at grade in this State at  
which there are gates or flagmen, 2

Are your frogs and guard rails blocked as required by Act  
174, Session Laws 1883? Yes.

How are they treated? Blocked with wood.

*Stations.*

Number of stations on whole line,	83
Same in Michigan,	8

*Employees.*

Number persons regularly employed on all roads operated by company, including officials,	1,939
Same in Michigan,	260
Classify your employes as per following list:	

	NUMBER.
Baggagemen,	15
Brakemen,	140
Conductors,	76
Engineers,	104
Firemen,	112
Laborers,	933
Shopmen,	324
Yardmen,	58
Others,	177

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? 22.98

Give the number of miles required to complete fence both sides of your  
track, in Michigan, and the counties in which needed:

Gogebic county, 152.67.

Total miles required, 152.67

*Road Bed and Track.*

Number of track sections in Michigan, - - - -	14
Average length of sections—miles, - - - -	6
Average number of men in each section gang, - - - -	8
Number of new ties put in whole line during the year, - - - -	324,788
Number of new ties put in track in Michigan, - - - -	22,560
Average number of new ties per mile of road, - - - -	509
New rails put in track:	
Steel (6,482 tons), 57.93 miles.	
Total miles of track laid with steel rails, - - - -	670.77
Timber culverts replaced during the year, - - - -	None.
New bridges built during the year, - - - -	None.

*Bridges and Culverts.*

Amount of trestle work replaced with earth during the year, —linear feet, —None in Michigan.	
New bridges built during the year,—number - - - -	None.

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - -	86	\$613,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - -	11	58,200 00
Total, - - - -	97	\$671,200 00
Number of passenger cars—12 wheel, includ- ing official cars, - - - -	1	11,000 00
Number of passenger cars—8 wheel, including official cars, - - - -	46	185,000 00
Number of express and baggage cars, - - - -	16	40,000 00
Number of box freight cars, - - - -	1,990	909,600 00
Number of stock cars, - - - -	55	21,000 00
Number of platform cars, - - - -	1,055	340,000 00
Number of charcoal cars, - - - -	23	8,500 00
Number of ore cars, - - - -	850	290,000 00
Number of coal cars,—gondolas, - - - -	300	120,000 00
Number of conductors' way cars, - - - -	43	30,000 00
Number of refrigerator cars, - - - -	11	6,500 00
Other cars as follows:		
Steam excavators, - - - -	5	30,000 00
Tool cars, 2; wrecking cars, 4; pile drivers with cars, 2; boarding cars, 2, - - - -	10	14,000 00
Total, - - - -	4,405	\$2,005,600 00
Number of locomotives equipped with power brakes, - - - -	77	
Number of passenger-train cars equipped with power brakes, - - - -	61	

Number of freight cars equipped with power brakes, 306  
 What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse air brake.  
 Are your freight cars being equipped with automatic couplers as required by Act. No. 147, Session Laws of 1885? Yes.  
 What pattern or patterns have you adopted for use? Blocker coupler.  
 How are your passenger cars heated? Part by stoves and part by steam.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year,	-	-	866,057
Miles run by freight trains during the year,	-	-	1,526,718
Total mileage of trains earning revenue,	-	-	2,392,775

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried,	30,437		
Number of local passengers carried,	516,838		
Total number of passengers carried,	547,275		
Total passenger mileage, or passengers carried one mile,		22,273,484	
Average distance traveled by each passenger,			40.7
Average amount received from each passenger,			\$1 07.000
Average rate of fare per mile for through passengers,			02.546
Average rate of fare per mile for local passengers,			02.637
Average rate of fare per mile for all passengers,			02.673

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	1,022,183		
Number of tons of local freight carried,	1,823,352		
Total tons of freight carried,	2,845,535		
Total mileage of through freight,		161,060,058	
Total mileage of local freight,		102,984,890	
Total freight mileage, or tons carried one mile,		264,044,948	
Average ton haul for through freight,			157.5
Average ton haul for local freight,			56.4
Average ton haul for all freight,			92.7
Average amount received for each ton haul,			\$0 98.000
Average rate per ton per mile, received for through freight,			00.737
Average rate per ton per mile, received for local freight,			01.539
Average rate per ton per mile, received for all freight,			01.057

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain, - - - - -	87
Flour, - - - - -	20
Provisions (beef, pork, lard, etc.), - - - - -	169
Animals, - - - - -	225
Other agricultural products, - - - - -	101
Lumber and forest products, - - - - -	83,016
Coal, - - - - -	46
Plaster, lime and cement, - - - - -	11
Salt, - - - - -	4
Railroad iron, iron and steel rails, - - - - -	40
Other iron and castings, - - - - -	160
Ores, - - - - -	1,394,951
Stone, brick and sand, - - - - -	737
Manufactures,—articles shipped from point of production, - - - - -	1,087
Merchandise and other articles not enumerated above, - - - - -	1,713
Total forwarded, - - - - -	1,482,367

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	23,239	.81
Flour, - - - - -	12,784	.44
Provisions (beef, pork, lard, etc.), - - - - -	15,255	.53
Animals, - - - - -	5,778	.20
Other agricultural products, - - - - -	5,430	.19
Lumber and forest products, - - - - -	753,787	26.50
Coal, - - - - -	67,498	2.38
Plaster, lime and cement, - - - - -	6,822	.25
Salt, - - - - -	1,727	.06
Railroad iron, iron and steel rails, - - - - -	342	.01
Pig and bloom iron, - - - - -	6,622	.23
Other iron and castings, - - - - -	9,586	.33
Ores, - - - - -	1,668,688	58.64
Stone, brick and sand, - - - - -	65,488	2.30
Manufactures,—articles shipped from point of production, - - - - -	76,162	2.68
Merchandise and other articles not enumerated above, - - - - -	126,327	4.45
Total tons carried, - - - - -	2,845,535	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The United States Express Company do a general express business on this road. They make their own rates and pay this company a stipulated amount monthly and a percentage of the earnings over a specified amount

for the facilities furnished them. Freight is delivered into this company's cars at the depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Miles of poles 625, miles of wire 1,107, Western Union Telegraph Company; miles of wire 780, M., L. S. & W. R'y Co. Total miles of wire 1,887.

*Transportation Companies.*

**SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.**

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Wagner Palace Car Company, New York, run over the line of this road. We pay mileage on number of miles run by its cars.

**REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.**

**KILLED.**

March 24, John Husby, laborer at lumber camp, Thayer Siding. Found dead on side track; do not know cause.

March 27, Herman Mititz, laborer, Bessemer. Found dead in yard; supposed to have been struck by train.

October 12, Anthony Kelly, engineer, Interior. Engine run off switch; scalded by steam.

October 29, D. McCarthy, brakeman, Watersmeet. Fell between cars while making coupling.

November 27, Sully Neley, woodsman, Watersmeet. Found on track with head cut off.

**INJURED.**

February 5, Charles M. Beattie, roadmaster, Marenisco. Collision, right foot and back injured.

March 9, James Kessel, section laborer, Ironwood. Taking hand car from track; leg hurt.

March 11, Julius Hunt, section laborer, Bessemer. Drawing spike with bar; slight injury.

April 3, William Miller, brakeman, Watersmeet. Struck by wire cable unloading gravel train; leg injured.

April 24, Thomas H. Walch, brakeman, Ironwood. Coupling; shoulder bruised.

May 6, Thomas Walker, trespasser, south of Bessemer. Found side of track with head cut; not serious.

June 17, Charles Anderson, section laborer, Marenisco. Taking hand car from track; slightly injured.

June 22, John Moak, brakeman, Wakefield. Coupling; fingers of left hand crushed.

June 27, James Wasley, trespasser, near Bessemer. Struck by engine and thrown from track; not seriously injured.

June 30, Pasco Douriano, laborer, Ironwood. Stepping from ore car to another while in motion; badly bruised.

July 29, H. D. Miner, hotel keeper, Wakefield. Stepped on car to see party and in getting off after train started fell between platform and car; wrist broken.

August 12, Frank Williams, laborer, Watersmeet. Struck by derrick of wrecking car; two fingers of left hand cut off.

August 22, Adolph Hetland, passenger, Ramsay. Jumped from passenger train while train was in motion: head cut, intoxicated.

September 5, Nelson M. Winton, brakeman, Watersmeet. Coupling; not seriously injured.

September 8, Peter Zelinski, laborer, Watersmeet. Caught fingers in cogs of derrick; two fingers crushed.

October 12, John O. Hanlin, fireman, Interior. Jumped from engine when it run off switch; slightly injured.

October 12, Charles Manning, switchman, Ironwood. attempted to step on foot board of engine; foot cut off.

October 21, Frank Lafren, laborer, Watersmeet. Unloading logs from car; arm broken.

October 21, J. W. Madigan, brakeman, Ironwood. Coupling; first two fingers of left hand crushed.

October 28, William Manthly, fireman, Ironwood. Collision account misplaced switch; jumped and sprained ankle.

October 31, Nelson Winton, brakeman, Bessemer. Coupling fell in front of engine; arm cut off.

November 1, John Smith, laborer, Marenisco. Rail fell on foot; big toe crushed.

November 4, Peter Howe, merchant, Ed. Sampson, mine captain, Ironwood. Driving buggy over crossing, struck by switching train, buggy broken, horse ran away; men thrown out but not seriously injured.

November 7, Andrew Ericson, laborer, Watersmeet. Stepped from one car to another on moving train, fell between cars; right foot cut off.

November 8, Frank Zellinar, woodsman, Watersmeet. Climbed between two freight cars standing at station, caught foot between draw-bars; foot bruised.

November 15, J. T. Grogen, fireman, Bessemer. Slipped off engine; ankle sprained.

November 18, James McMath, fireman, Watersmeet. Jumped from engine; face and arm bruised.

November 19, Peter Johnson, woodsman, one-half mile south of Ironwood. Found along side of track, head injured, eye knocked out; supposed injury was caused by some unknown person, and man placed near track.

November 21, Lawrence Kittell, engineer, Ironwood. Switching cars at ore chute which projects over track, engine run into chute; engineer bruised and wrist broken.

December 20, Andrew Wait, laborer, Marenisco. Taking hand car from track; leg bruised.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....					2	
Coupling cars.....		1			5	
Derailements.....		1			1	
Falling from trains.....				1	1	
Frogs.....						
Getting on and off trains.....					1	
Highway crossings.....						2
Miscellaneous.....					18	
Overhead obstructions.....						
Trespassers on trains.....						2
Trespassers on tracks.....			3			3
Total.....		2	3	1	23	7

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	5
Number of persons injured during the year,	31
Number of casualties purely accidental,	8
Number resulting from lack of caution, carelessness, or misconduct,	20
Persons killed or injured while intoxicated,	1
Trespassers and tramps killed or injured,	7
Suicides,	—

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

Employés.	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....	1	6	7
Conductors.....			
Engineers.....	1	1	2
Firemen.....		4	4
Laborers.....	1	10	11
Shopmen.....			
Yardmen.....		1	1
Not classified above.....		1	1
Total.....	3	23	26

STATE OF WISCONSIN, }  
COUNTY OF MILWAUKEE, } ss.

H. F. Whitcomb, General Manager, and W. R. Hancock, Auditor, of the Milwaukee, Lake Shore & Western Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

Signed,

[L. S. OF R. R.]

H. F. WHITCOMB.

W. R. HANCOCK.

Subscribed and sworn to before me this 4th day of April, A. D. 1890.

C. S. PIERCE,

*Commissioner for Michigan in Wisconsin.*



ANNUAL REPORT  
OF THE  
HANCOCK & CALUMET RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 14, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, WM. N. CROMWELL, New York City.  
*Secretary and Treasurer*, ALFRED JAALITZKI, New York City.  
*Auditor and Cashier*, C. M. HOAR, Hancock, Mich.  
*General Manager and Superintendent*, C. A. WRIGHT, Hancock, Mich.  
*General Passenger and Freight Agent*, R. H. BRELSFORD, Hancock, Mich.  
*Attorney*, J. W. STONE, Houghton, Mich.

DIRECTORS.

WM. N. CROMWELL, New York City.  
MERRIT E. HAVILAND, New York City.  
A. S. DAME, New York City.  
A. S. BIGELOW, Boston, Mass.  
JOHN DANIELL, Opechee, Mich.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—January 14, 1885.

Number of stockholders at date of last election, - - - - - 11

Number of stockholders in Michigan at same date, - - - - - 1

Amount of full paid stock held in Michigan at same date, - - - - - \$100 00

Date of annual meeting of stockholders,—Second Tuesday in July.

Fiscal year of company ends, December 31.

General offices of the company are located at Hancock, Mich.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income,		\$134,657 44
Total expenses, including taxes,	\$78,044 03	
Net income,		56,613 41
Interest on funded debt,	\$15,000 00	
Interest on unfunded debt,	1,308 54	
Balance for the year,		\$40,304 87
Balance (profit and loss) last year,		56,736 01
Balance forward to next year,	\$97,040 88	
	\$97,040 88	\$97,040 88

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$350,000 00
Par value of shares,	\$100
No. of shares issued,	3,500
Amount paid in on common,	\$350,000 00
Total amount paid in, as per books of the company,	\$350,000 00
Paid in per mile of road owned by company,	
—20.36 miles,	\$17,190 57

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage.....	6%	June 1, 1901.....	Boston.....	\$250,000 00
Total funded debt.....				\$250,000 00

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For Construction.....		\$112,952 74
For Equipment.....		
For Real Estate.....		
For Renewals.....		
For Miscellaneous.....		
For Current Balances.....		10,489 53
<input type="checkbox"/> Total Unfunded Debt.....		\$123,442 57

## RECAPITULATION.

Total funded debt, - - - - -	\$250,000 00
Total unfunded debt, - - - - -	123,442 57
Total debt liabilities, - - - - -	<u>\$373,442 57</u>
Amount of debt liabilities per mile of road,—20.36 miles,	18,341 97
Total amount of stock and debt, - - - - -	<u>\$723,442 57</u>
Stock and debt per mile of road,—20.36 miles, . . .	35,532 54

## GENERAL BALANCE SHEET.—Dr.

Construction account, - - - - -	\$757,490 50
Cash items:	
Cash, - - - - -	\$4,666 35
Due from agents, - - - - -	307 11
	<u>\$4,973 46</u>
Other assets:	
Materials and supplies, - - - - -	\$7,215 23
Sinking funds, - - - - -	38,850 00
Debit balances from companies and individuals, 11,954 26	
	<u>58,019 49</u>
Total, - - - - -	<u>\$820,483 45</u>

## GENERAL BALANCE SHEET.—Cr.

Capital stock, - - - - -	\$350,000 00
Funded debt, - - - - -	250,000 00
	<u>\$600,000 00</u>
Unfunded debt:	
Notes payable, - - - - -	\$112,952 74
Vouchers and accounts, - - - - -	10,489 83
	<u>123,442 57</u>
Profit and loss or income accounts, . . .	97,040 88
Total, - - - - -	<u>\$820,483 45</u>

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment, - - -	\$757,490 50
Average cost per mile of road, not including sidings,—	
20.36 miles, - - - - -	37,204 83
Proportion of cost for Michigan, - - - - -	757,490 50

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Improvements and new sidings, - - - - -	\$11,386 22
Total, - - - - -	<u>\$11,386 22</u>
Total charges to property account as above, - - - - -	\$11,386 22
Net addition to property account, - - - - -	<u>\$11,386 22</u>

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line:	
Local fares, - - - - -	\$16,966 99
Total passenger fares, - - - - -	<u>\$16,966 99</u>
Express and baggage, - - - - -	212 34
Mails, - - - - -	817 65
Total passenger department earnings, - - - - -	\$17,996 98
Proportion for Michigan, - - - - -	\$17,996 98
Per train mile, - - - - -	80
Per mile of road, - - - - -	883 93

## FREIGHT EARNINGS.

Main line:	
Local traffic, - - - - -	\$116,166 81
Total traffic, - - - - -	<u>\$116,166 81</u>
Total freight department earnings, - - - - -	\$116,166 81
Proportion for Michigan, - - - - -	\$116,166 81
Per train mile, - - - - -	1 79
Per mile of road, - - - - -	5,705 60
Total transportation earnings, - - - - -	<u>\$134,163 79</u>
Transportation earnings per mile of road, - - - - -	\$6,589 57
Transportation earnings per train mile, - - - - -	1 53
From other sources, - - - - -	493 65
Total earnings from operation of road, - - - - -	<u>\$134,657 44</u>
Total earnings per mile of road, - - - - -	\$6,613 82
Total earnings per train mile, - - - - -	1 54
Proportion of taxable earnings for Michigan, - - - - -	<u>\$134,657 44</u>

Total taxable earnings per mile of road in Michigan, - - - - -	\$6,613 82	
Total income from all sources, - - - - -		\$134,657 44
Proportion of income for Michigan, - - - - -		134,657 44

## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track, - - - - -	\$11,087 35
Repairs of bridges, including culverts and cattle guards, - - - - -	1,136 46
Repairs of buildings, - - - - -	1,172 23
Total, - - - - -	\$13,396 04

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives, - - - - -	\$3,269 25
Repairs of passenger cars, - - - - -	1,009 24
Repairs of freight cars, - - - - -	7,860 49
Total, - - - - -	\$12,138 98

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	\$12,280 62
Oil and waste, - - - - -	1,410 63
Locomotive service, - - - - -	10,301 80
Passenger train service, - - - - -	1,560 00
Passenger train supplies, - - - - -	121 18
Freight train service, - - - - -	7,484 63
Freight train supplies, - - - - -	121 18
Mileage of freight cars, - - - - -	295 00
Damage and loss of freight and baggage, - - - - -	21 81
Damages to property and cattle, - - - - -	141 00
Agents and station service, - - - - -	6,966 24
Station supplies, - - - - -	630 16
Total, - - - - -	\$41,334 25

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company, - - - - -	\$4,500 00
Salaries of clerks in general offices, - - - - -	1,003 02
Law expenses, - - - - -	150 00
Insurance, - - - - -	556 80
Stationery and printing, - - - - -	557 34
Outside agencies and advertising, - - - - -	64 22
Contingencies, - - - - -	1,663 97
Taxes, - - - - -	2,679 41
Total, - - - - -	\$11,174 76

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - -	17.17	\$13,396 04
Maintenance of motive power and cars, - - -	15.55	12,138 98
Conducting transportation, - - - - -	52.96	41,334 25
General expenses, including taxes, - - -	14.32	11,174 76
Total operating expenses and taxes, - - -	100.00	\$78,044 03
Operating expenses and taxes per mile of road,	\$3,833 20	
Operating expenses and taxes per train mile run, for trains earning revenue,—87,315 miles,	89	
Proportion of operating expenses and taxes for Michigan:		
Main line, - - - - -	78,044 03	
Total proportion of expenses for Michigan, - - -		\$78,044 03
Percentage of expenses to earnings,—58%.		
Net earnings per mile of road, - - -	\$2,780 61	
Net earnings per train mile, - - - - -	64	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Hancock to Calumet, December, 1885.

From Junction to Lake Linden, December, 1885.

From Calumet to Allouez, March 12, 1887.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Hancock to Allouez, - - -	17.86	
Total length completed, - - - - -		17.86

## BRANCHES.

Lake Linden from Junction to Lake Linden, - - -	2.50	
Total length of branches owned by this company, - - -		2.50
Total length of branches owned by company in Michigan, - - -	2.50	
Total length of road belonging to this company, - - -		20.36
Total length of road belonging to this company in Michigan, - - - - -	20.36	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated, - - - - -	11.02	
Aggregate length of tracks in Michigan belonging to this company computed as single track, - - -		31.38
Gauge of track, 3 feet.		

	Total Miles.	In Michigan.
Total miles operated by the company, - - -	20.36	20.36

*Number of Bridges and Trestles in Michigan.*

Iron bridges, number of, - - -	3;	aggregate length, feet, -	560
Wooden trestles, number of - - -	17;	aggregate length, feet; -	4,450
Total, - - - - -	20;	- - - - -	5,010

*Draw Bridges in Michigan.*

How many on your line? None.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State and at what locality?  
Mineral Range railroad at Osceola.

What railroads cross your road either over or under your grade in this State, and where? None.

At what crossings are interlocking and derailing switches in operation?  
Osceola.

What pattern or patterns have you adopted? Pennsylvania Steel Company's.

Number of crossings of highways at grade in this State, - - -	12
Number of crossings of highways over or under railroad:	
Over,—1. Under,—None, - - - - -	1
Number of highway bridges 18 feet above track, - - -	1
Have safety guards been erected at over-head obstructions, -	Yes.
Are your frog and guard rails blocked as required by act 174, session laws 1883? Yes.	

How are they treated? Wooden blocks are used.

*Stations.*

Number of stations on whole line, - - - - -	6
Same in Michigan, - - - - -	6

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials, - - - - -	80
Same in Michigan, - - - - -	80

Classify your employés as per following list:

	Number.
Baggagemen, - - - - -	2
Brakemen, - - - - -	10
Conductors, - - - - -	3
Engineers, - - - - -	5
Firemen, - - - - -	5
Laborers, - - - - -	21
Shopmen, - - - - -	6
Yardmen, - - - - -	5
Others, - - - - -	23

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - - 6

Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:

In Houghton county, - - - - - 34  
 Total miles required, - - - - - 34

*Road Bed and Track.*

Number of track sections in Michigan, - - - - - 5  
 Average length of sections,—miles, - - - - - 5  
 Average number of men in each section gang, - - - - - 4

*Bridges and Culverts.*

New bridges built during the year, - - - - - None.

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	5	\$35,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	1	3,000 00
Total, - - - - -	6	\$38,000 00

Number of passenger cars—8 wheel, including official cars, - - - - -	4	8,000 00
Number of express and baggage cars, - - - - -	1	250 00
Number of box freight cars, - - - - -	15	4,500 00
Number of wood cars, - - - - -	24	4,800 00
Number of platform cars, - - - - -	49	9,800 00
Number of ore cars, - - - - -	75	22,493 45
Other cars as follows: Hand cars, - - - - -	4	280 00
Total, - - - - -	172	\$88,123 45

Number of locomotives equipped with power brakes, - 1  
 Number of passenger train cars equipped with power brakes, 4  
 Number of freight cars equipped with power brakes,—None.  
 What patterns of power brakes have you in use? Westinghouse automatic air brake; 1 locomotive, 4 cars.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? Blocker.

How are your passenger cars heated? Spear stoves and heaters. Arrangements are now being made to substitute Baker hot water heaters.



## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year,	-	-	22,447
Miles run by freight trains during the year,	-	-	64,868
Total mileage of trains earning revenue,	-	-	87,315

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Number of local passengers carried,	55,779		
Total number of passengers carried,	55,779		
Total passenger mileage, or passengers carried one mile,		385,509	
Average distance traveled by each passenger,		6.91	
Average amount received from each passenger,			\$0 30.41
Average rate of fare per mile for local passengers,			04.40
Average rate of fare per mile for all passengers,			04.40

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of local freight carried,	616,493		
Total tons of freight carried,	616,493		
Total mileage of local freight,		4,865,039	
Total freight mileage, or tons carried one mile,		4,865,039	
Average ton haul for local freight,		7.89	
Average ton haul for all freight,		7.89	
Average amount received for each ton haul,			\$0 18.84
Average rate per ton per mile, received for local freight,			02.38
Average rate per ton per mile, received for all freight,			02.38

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	1,380
Flour,	326
Provisions (beef, pork, lard, etc.),	1,103
Other agricultural products,	317
Lumber and forest products,	159,972
Coal,	9,874
Copper,	22,949
Copper rock,	405,016
Manufactures,—articles shipped from point of production,	4,282
Merchandise and other articles not enumerated above,	11,274
Total forwarded,	616,493

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	1,380	00.22
Flour, - - - - -	326	00.05
Provisions (beef, pork, lard, etc.), - - - - -	1,103	00.18
Other agricultural products, - - - - -	317	00.05
Lumber and forest products, - - - - -	159,972	25.95
Coal, - - - - -	9,874	01.60
Copper and copper rock, - - - - -	427,965	69.42
Manufactures,—articles shipped from point of production, - - - - -	4,282	00.70
Merchandise and other articles not enumerated above, - - - - -	11,274	01.83
Total tons carried, - - - - -	616,493	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company runs on this road doing a general express business and paying 20 cents per 100 pounds for all express freight carried. The express is taken at our depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

10 miles of telegraph line belonging to the Mineral Range Railroad Co.

STATE OF MICHIGAN, }  
COUNTY OF HOUGHTON, } ss.

Charles A. Wright, General Manager, of the Hancock & Calumet Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

CHARLES A. WRIGHT.

Subscribed and sworn to before me this 10th day of April, A. D. 1890.

CHARLES D. HANCHETT, *Notary Public.*

ANNUAL REPORT  
OF THE  
MINERAL RANGE RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 14, 1890.]

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OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, CHARLES BARD, New York City.  
*Secretary and Treasurer*, JOHN TULLY, New York City.  
*Auditor and Cashier*, C. M. HOAR, Hancock, Mich.  
*General Manager*, C. A. WRIGHT, Hancock, Mich.  
*General Passenger and Freight Agent*, R. H. BRELSFORD, Hancock, Mich.  
*Attorney*, J. W. STONE, Houghton, Mich.

DIRECTORS.

SIDNEY DILLON, New York City.  
RUSSELL SAGE, New York City.  
RUSH B. TAGGART, New York City.  
E. L. FERRY, New York City.  
HENRY F. SHOEMAKER, New York City.  
W. R. SHELBY, Grand Rapids, Mich.  
CHARLES BARD, Norwich, Conn.  
COSTELLO LIPPITT, Norwich, Conn.  
HENRY T. CHAPMAN JR., New York City.  
WM. G. SMITH, New York City.  
CHAS. W. CASS, New York City.

Terms expire July 8, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—November 3, 1871.  
Date of annual meeting of stockholders,—Second Tuesday in July.  
Fiscal year of company ends December 31.  
General offices of the company are located at Hancock, Michigan.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -	- - - - -	\$109,775 06
Total expenses, including taxes, - - - - -	\$61,930 23	
Net income, - - - - -	- - - - -	47,844 83
*Interest on unfunded debt, - - - - -	\$184 72	
Balance for the year, - - - - -	- - - - -	\$47,660 11
Balance (profit and loss) last year, - - - - -	- - - - -	136,488 73
Balance forward to next year, - - - - -	\$184,148 84	
	\$184,148 84	\$184,148 84

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, - - - - -	\$400,000 00
Par value of shares, - - - - -	\$100 00
No. of shares issued, - - - - -	3,917
Amount paid in on common, - - - - -	\$391,700 00
Total amount paid in as per books of the company, - - - - -	\$391,700 00
Paid in per mile of road owned by company	
—17 miles, - - - - -	\$23,041 18

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
Main line, June 1, 1873.....	8%	June 1, 1898.....	New York...	\$198,900 00
Main line, December 14, 1896.....	4%	January 1, 1937.....	New York...	213,300 00
Calumet ext. and Franklin branch, Oct. 1, 1885,	5%	October 1, 1915.....	New York...	100,000 00
Houghton extension, January 1, 1896.....	5%	January 1, 1916.....	New York...	100,000 00
Total funded debt.....				\$612,100 00

\* No interest on bonds charged off in 1899, the road being in the hands of a receiver until November 30, of that year, and being now in process of reorganization.

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For construction.....	.....	.....
For equipment.....	.....	.....
For real estate.....	.....	.....
For renewals.....	.....	.....
For miscellaneous.....	Accrued interest on bonds.....	\$21,116 00
For current balances.....	.....	8,105 21
Total unfunded debt.....		\$29,221 21

## RECAPITULATION.

Total funded debt,	- - - - -	\$612,100 00
Total unfunded debt,	- - - - -	29,221 21
Total debt liabilities,	- - - - -	\$641,321 21
Amount of debt liabilities per mile of road,—17 miles,	-	37,724 77
Total amount of stock and debt,	- - - - -	1,033,021 21
Stock and debt per mile of road,—17 miles,	- - - - -	60,765 95

## GENERAL BALANCE SHEET.—DR.

Construction account,	- - - - -	\$653,269 32
Equipment account,	- - - - -	85,223 16
		\$738,492 48
Cash items:		
Cash,	- - - - -	\$47,289 63
Due from agents,	- - - - -	1,102 63
		48,392 26
Other assets:		
Materials and supplies,	- - - - -	\$11,187 61
Debit balances from companies and individuals,	- - - - -	8,350 81
Account H. S. Ives & Co.,—in suspense,	- - - - -	408,970 89
Sundry stocks,	- - - - -	1,776 00
		430,285 31
Total,	- - - - -	\$1,217,170 05

## GENERAL BALANCE SHEET.—CR.

Capital stock,	- - - - -	\$391,700 00
Funded debt,	- - - - -	612,100 00
		\$1,003,800 00
Unfunded debt:		
Interest unpaid, accrued on bonds,	- - - - -	\$21,116 00
Notes payable,	- - - - -	904 50
Vouchers and accounts,	- - - - -	7,200 71
		29,221 21
Profit and loss or income accounts,	- - - - -	184,148 84
Total,	- - - - -	\$1,217,170 05

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment,	\$738,492 48
Average cost per mile of road, not including sidings,—17 miles,	43,440 74
Proportion of cost for Michigan.	738,492 48

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Improvement, draw bridge,	\$400 00
New buildings,	3,724 10
New locomotives,	8,075 80
New cars,	2,742 30
Total,	\$14,942 20

## BRANCHES.

Extensions and new sidings,	\$304 36
Total charges to property account as above,	\$15,246 56
Net addition to property account,	\$15,246 56

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares,	\$33,486 74
Total passenger fares,	\$33,486 74
Express and baggage,	1,198 63
Mails,	987 42
Total passenger department earnings,	\$35,672 79
Proportion for Michigan,	\$35,672 79
Per train mile,	1 02
Per mile of road,	2,098 39

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic,	\$69,711 66
Total traffic,	\$69,711 66
Total freight department earnings,	\$69,711 66
Proportion for Michigan,	\$69,711 66
Per train mile,	1 75
Per mile of road,	4,100 68
Total transportation earnings,	\$105,384 45

Transportation earnings per mile of road, -	\$6,199 08	
Transportation earnings per train mile, -	1 41	
From other sources, - - - - -		\$4,390 61
Total earnings from operation of road, - - -		\$109,775 06
Total earnings per mile of road, - - -	\$6,457 35	
Total earnings per train mile, - - -	1 47	
Proportion of taxable earnings for Michigan, - - -		109,775 06
Total taxable earnings per mile of road in Michigan, - - - - -	\$6,457 35	
Total income from all sources, - - -		\$109,775 06
Proportion of income for Michigan, - - -		109,775 06

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track, - - - - -	\$6,400 38
Renewals of ties, - - - - -	1,210 00
Repairs of bridges, including culverts and cattle guards, -	752 53
Repairs of buildings, - - - - -	1 901 58
Total, - - - - -	\$10,264 49

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives, - - - - -	\$3,628 52
Repairs of passenger cars, - - - - -	1,074 77
Repairs of freight cars, - - - - -	1,936 22
Total, - - - - -	\$6,639 51

## CLASS 3.—Conducting Transportation.

Fuel for locomotives, - - - - -	\$7,933 74
Oil and waste, - - - - -	960 20
Locomotive service, - - - - -	6,644 92
Passenger train service, - - - - -	1,500 00
Passenger train supplies, - - - - -	151 05
Freight train service, - - - - -	4,162 58
Freight train supplies, - - - - -	151 05
Damage and loss of freight and baggage, - - - - -	167 71
Damages to property and cattle, - - - - -	233 00
Agents and station service, - - - - -	4,515 68
Station supplies, - - - - -	905 92
Operating P. L. draw bridge, - - - - -	2,640 00
Total, - - - - -	\$29,965 85

## CLASS 4.—General Expenses.

Salaries of the general officers of the company,	-	-	\$4,500 00
Salaries of clerks in general offices,	-	-	1,003 02
Law expenses,	-	-	1,596 28
Insurance,	-	-	1,368 13
Stationery and printing,	-	-	1,152 09
Outside agencies and advertising,	-	-	84 98
Contingencies,	-	-	3,048 97
Taxes,	-	-	2,306 91
Total,	-	-	<u>\$15,060 38</u>

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings,	16.57	\$10,264 49
Maintenance of motive power and cars,	10.72	6,639 51
Conducting transportation,	48.39	29,965 85
General expenses, including taxes,	24.32	15,060 38
Total operating expenses and taxes,	100.00	<u>\$61,930 23</u>
Operating expenses and taxes per mile of road,	\$3,642 95	
Operating expenses and taxes per train mile run,		
for trains earning revenue,—74,514 miles,	83	
Proportion of operating expenses and taxes for Michigan:		
Main line,	61,930 23	
Total proportion of expenses for Michigan,	<u>61,930 23</u>	<u>\$61,930 23</u>
Percentage of expenses to earnings,—56%.		
Net earnings per mile of road,	2,814 30	
Net earnings per train mile,	64	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Houghton, to Red Jacket, March 26, 1886.

## MAIN LINE.

	Miles, 100ths.	Miles, 100ths.
In Michigan, from Houghton to Red Jacket,	15.00	
Total length completed,	-	15.00

## Branches.

Franklin Branch, from Franklin Station to Quincy Mine,	2.00	
Total length of branches owned by company,	-	<u>2.00</u>



Total length of branches owned by company in Michigan,	2.00	
Total length of road belonging to this company,		17.00
Total length of road belonging to this company in Michigan,	17.00	
Aggregate length in Michigan, of sidings, spurs, and other tracks not above enumerated,		5.00
Aggregate length of tracks in Michigan belonging to this company, computed as single track,		22.00

Gauge of track, 3 feet.

	Total Miles, In Michigan.	
Total miles operated by the company,	17.00	17.00

*Number of Bridges and Trestles in Michigan.*

Wooden trestles, number of,	6; aggregate length, feet,	645
Total,	6;	645

*Draw Bridges in Michigan.*

How many on your line? 1

Where located, when built and length of draw span.

Houghton, Mich., built in 1886; total length of draw span 180 feet.

Character of structure:

Have truss spans supported by wooden cribs filled with riprap.

Material of which constructed:

Wood.

Height above water, and depth of water under bridge:

Height above water 6 feet, depth of water 34 feet.

How swung, by engine or hand power?

Engine.

Approaches, straight or curved:

Curved.

Do you require all trains to come to a full stop before crossing a draw, and how are they signalled?

All trains required to come to full stop before crossing draw, trains are signalled by flagman stationed at draw.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Hancock & Calumet Railroad at Osceola.

Hecla & Torch Lake Railroad at Calumet.

At what crossings are interlocking and derailling switches in operation?  
Osceola.

What pattern or patterns have you adopted?

Pennsylvania Steel Company's pattern.

Number of crossings of highways at grade in this State, 18

Number of crossings of highways at grade in this State  
at which there are gates or flagmen, 2

Number of crossings of highways over or under railroad:

Over,—1.	Under,—1,	2
Are your frogs and guard rails blocked as required by Act 174, Session Laws 1883?		Yes.
How are they treated? Wooden blocks are used.		

*Stations.*

Number of stations on whole line,	- - - - -	4
Same in Michigan,	- - - - -	4

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials,	- - - - -	70
Same in Michigan,	- - - - -	70

Classify your employés as per following list:

	Number.
Baggagemen,	4
Brakemen,	6
Conductors,	2
Engineers,	5
Firemen,	5
Laborers,	16
Shopmen,	10
Yardmen,	8
Others,	14

REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?	- - - - -	3
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Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed:

Houghton county,	- - - - -	31
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*Road Bed and Track.*

Number of track sections in Michigan,	- - - - -	3
Average length of sections,—miles,	- - - - -	6
Average number of men in each section gang,	- - - - -	4
Number of new ties put in whole line during the year,	- - - - -	6,050
Number of new ties put in track in Michigan,	- - - - -	6,050
Average number of new ties per mile of road,	- - - - -	355

*Bridges and Culverts.*

New bridges built during the year,—number,	- - - - -	None.
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## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	1	\$7,802 80
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	1	6,857 07
Number of locomotives of 10 to 20 tons weight, exclusive of tender, - - - - -	4	21,118 30
Total, - - - - -	6	\$35,778 17
Number of passenger cars—8-wheel, including official cars, - - - - -	5	12,423 00
Number of express and baggage cars, - - - - -	2	5,768 70
Number of box freight cars, - - - - -	32	11,450 00
Number of platform cars, - - - - -	58	17,961 18
Number of conductors' way cars, - - - - -	1	328 05
Other cars, - - - - -	4	278 65
Total, - - - - -	102	\$83,987 75
Number of locomotives equipped with power brakes, - - - - -	4	
Number of passenger-train cars equipped with power brakes, - - - - -	5	
Number of freight cars equipped with power brakes, - - - - -	None.	
What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse automatic air brake on 3 locomotives and four cars; Eames' vacuum brake on 1 locomotive and one car.		
Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.		
What pattern or patterns have you adopted for use? Blocker.		
How are your passenger cars heated? Spear stoves and heaters; arrange-are now being made to substitute Baker hot water heaters.		

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year, - - -	34,680
Miles run by freight trains during the year, - - -	39,834
Total mileage of trains earning revenue, - - -	74,514

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of local passengers carried, - - -	115,924		
Total number of passengers carried, - - -	115,924		

	Miles.	Rate. Dollars. Cents.
Total passenger mileage, or passengers carried one mile,	857,519	
Average distance traveled by each passenger,	7.39	
Average amount received from each passenger,	-	\$0 28.88
Average rate of fare per mile for local passengers,	-	03.90
Average rate of fare per mile for all passengers,	-	03.90

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of local freight carried,	115,520		
Total tons of freight carried,	115,520		
Total mileage of local freight,	-	817,990	
Total freight mileage, or tons carried one mile,	-	817,990	
Average ton haul for local freight,	-	7.08	
Average ton haul for all freight,	-	7.08	
Average amount received for each ton haul,	-	-	\$0 60.34
Average rate per ton per mile, received for local freight,	-	-	08.52
Average rate per ton per mile, received for all freight,	-	-	08.52

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	3,213
Flour,	1,868
Provisions (beef, pork, lard, etc.),	11,365
Animals,	225
Other agricultural products,	1,503
Lumber and forest products,	53,931
Coal,	9,844
Copper,	11,062
Manufactures,—articles shipped from point of production,	4,491
Merchandise and other articles not enumerated above,	18,018
Total forwarded,	115,520

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain,	3,213	02.78
Flour,	1,868	01.62
Provisions (beef, pork, lard, etc.),	11,365	09.84
Animals,	225	00.19
Other agricultural products,	1,503	01.30
Lumber and forest products,	53,931	46.68
Coal,	9,844	08.52
Copper,	11,062	09.58
Manufactures,—articles shipped from point of production,	4,491	03.89
Merchandise and other articles not enumerated above,	18,018	15.60
Total tons carried,	115,520	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company runs on this road, paying one and one-half times first-class freight rates for the transportation of express matter, which is received and delivered by this road at the depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Fifteen miles belonging to this road.

STATE OF MICHIGAN, }  
COUNTY OF HOUGHTON, } ss.

Charles A. Wright, General Manager, of the Mineral Range Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed, CHARLES A. WRIGHT.

Subscribed and sworn to before me this 10th day of April, A. D. 1890.

CHARLES D. HANCHETT, *Notary Public.*

ANNUAL REPORT  
OF THE  
DULUTH, SOUTH SHORE AND ATLANTIC RAILWAY  
COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 17, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JAMES McMILLAN, Detroit, Mich.  
*Vice President*, CALVIN S. BRICE, New York City.  
*Secretary*, L. M. SCHWAN, New York City.  
*Auditor*, E. W. ALLEN, Marquette, Mich.  
*Treasurer*, W. A. C. EWEN, New York City.  
*General Manager*, W. F. FITCH, Marquette, Mich.  
*Superintendent*, D. M. PHILBIN, Marquette, Mich.  
*Assistant Superintendent*, A. M. SUTHERLAND, Marquette, Mich.  
*Chief Engineer*, C. H. V. CAVIS, Marquette, Mich.  
*General Passenger Agent*, C. B. HIBBARD, Marquette, Mich.  
*General Freight Agent*, WM. ORR, Marquette, Mich.  
*General Counsel*, W. P. HEALY, Marquette, Mich.

DIRECTORS.

JAMES McMILLAN, Detroit, Mich.  
SIR GEO. STEPHEN, Montreal, Canada.  
SIR DONALD SMITH, Montreal, Canada.  
WM. C. VAN HORN, Montreal, Canada.  
CALVIN S. BRICE, New York City.  
JOHN G. MOORE, New York City.  
JOHN W. STERLING, New York City.  
SAMUEL THOMAS, New York City.  
GEO. I. SENEY, New York City.  
RICHARD J. CROSS, New York City,  
THOS. W. PERRISAL, New York City.

Terms expire July 18, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—March 7, 1887.

Number of stockholders at date of last election, - - - - -

Number of stockholders in Michigan at same date, - - - - - 15

Amount of full paid stock held in Michigan at same date,—15,904 shares.

Date of annual meeting of stockholders,—Third Thursday in July.

Fiscal year of company ends December 31.

General offices of the company are located at Marquette, Mich., and 10 Wall St. New York City.

#### GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -	- - - - -	\$1,976,350 38
Total expenses, including taxes, - - -	\$1,161,515 28	
Net income, - - - - -	- - - - -	\$814,835 10
*Interest on funded debt, - - - - -	\$519,352 00	
Interest on unfunded debt, - - - - -	132,963 21	
Rentals of buildings, tracks, etc., - - -	22,317 09	
		674,632 30
Balance applicable to dividends, - - -	- - -	\$140,202 80
†Dividends declared, 6%, - - - - -	\$196,707 36	
Balance for the year, deficit, - - - - -	\$56,504 56	
Balance (profit and loss) last year, - - -	- - -	\$51,351 66
Dividends on M., H. & O. treasury stock, - - -	- - -	2,838 00
Balance forward to next year, - - - - -	- - -	2,314 90
	\$56,504 56	\$56,504 56

#### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$22,000,000 00
Par value of shares, - - - - -	\$100 00
No. of shares issued, { Common, 120,000	
{ Preferred, 100,000	
Amount paid in on common, - - - - -	\$12,000,000 00
Amount paid in on preferred, - - - - -	10,000,000 00
Total amount paid in as per books of the company, -	\$22,000,000 00

\* Duluth, South Shore & Atlantic, \$200,000.00; Marquette, Houghton & Ontonagon, \$319,352.00.

† On the Marquette, Houghton & Ontonagon preferred stock.

Paid in per mile of road owned by company,  
 —386.41 miles, - - - - - \$56,934 35

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
D., S. S. & A., first mortgage, issued January 1, 1887	5%	January 1, 1937	New York	\$4,000,000 00
D., S. S. & A. first consolidated mortgage bonds issued June 1, 1888	5%	June 1, 1938	New York	3,800,000 00
Car trust of July 9, 1888, closing payment to be made on November 7, 1896, interest included in this amount. Amount of monthly payment \$8,006.00	6%	Monthly	New York	568,355 00
Total funded debt				\$8,368,355 00

## UNFUNDED DEBT.

For what Incurred.	Is the Same to be Funded, or How Liquidated.	Amount.
For construction	Not determined	\$3,294,621 80
For equipment	To be paid in cash	140,815 86
For real estate		
For renewals		
For miscellaneous	To be paid in cash	118,286 78
For current balances	To be paid in cash	108,267 68
Total unfunded debt		\$3,656,992 11

## RECAPITULATION.

Total funded debt,	\$8,368,355 00
Total unfunded debt,	3,656,992 11
Total debt liabilities,	\$12,025,347 11
Amount of debt liabilities per mile of road,—386.41 miles,	31,120 61
Total amount of stock and debt,	\$34,025,347 11
Stock and debt per mile of road,—386.41 miles,	88,054 96

## GENERAL BALANCE SHEET.—Dr.

Construction account,	\$27,599,725 08
Equipment account,	1,570,899 68
	\$29,170,624 76
Other investments, specifying same:	



Sault Ste. Marie Bridge Company, -	\$43,681 40	
Mackinaw Transportation Company, -	135,764 93	
West Superior Terminal and Transfer Railway Company, - - - -	18,100 00	
Negaunee & Palmer Railroad, - -	89,945 15	
	<hr/>	\$287,491 48
Cash items:		
Cash, - - - - -	\$30,983 01	
Due from agents, - - - - -	20,318 78	
	<hr/>	51,301 79
Other assets:		
Materials and supplies, - - - -	\$144,594 63	
Debit balances from companies and individuals, - - - - -	44,606 23	
	<hr/>	189,560 86
Securities in treasury:		
D., S. S. & A., first consolidated bonds, -	\$3,800,000 00	
M., H. & O., preferred stock, - - -	35,632 63	
M., H. & O., common stock, - - -	27,370 00	
	<hr/>	3,863,002 63
Car trust equipment, - - - - -	- - - -	568,355 00
Profit and loss, - - - - -	- - - -	2,314 90
		<hr/>
Total, - - - - -	- - - -	\$34,132,651 42

## GENERAL BALANCE SHEET.—CR.

Capital stock, - - - - -	\$22,000,000 00	
Funded debt, - - - - -	8,368,355 00	
	<hr/>	\$30,368,355 00
Unfunded debt:		
Interest unpaid, - - - - -	\$44,521 52	
Dividends accrued, - - - - -	73,765 26	
Notes payable, - - - - -	3,435,437 65	
Vouchers and accounts, - - - - -	36,074 23	
Other liabilities (list as follows):		
Labor, - - - - -	51,934 85	
Coupon ticket ledger, - - - - -	15,048 67	
Mileage ledger, - - - - -	209 93	
	<hr/>	3,656,992 11
M., H. & O., lease account, - - - -	- - - -	68,489 18
M., H. & O., security account, - - -	- - - -	38,602 63
D., S. S. & A. lands - - - - -	- - - -	212 50
		<hr/>
Total, - - - - -	- - - -	\$34,132,651 42

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment,	-	-	\$29,170,624	76
Average cost per mile of road, not including sidings,—386.4 miles,	-	-	-	75,491 38
Proportion of cost for Michigan,	-	-	-	24,038,720 13

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings,	-	-	-	\$241,678	01
New buildings,	-	-	-	10,145	63
New locomotives,	-	-	-	57,412	69
New cars,	-	-	-	160,643	79
Total,	-	-	-	-	\$469,880 12

## BRANCHES.

Branches to mines, etc., extensions and new sidings,	-	-	-	-	\$15,545 31
Total,	-	-	-	-	\$15,545 31
Total charges to property account as above,	-	-	-	-	\$485,425 43
Net addition to property account,	-	-	-	-	\$485,425 43

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Roads.	Local Fares.	Through Fares.	Total Passenger Fares.	Express and Baggage.	Mails.	Other Sources.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
Main line and branches.....	\$105,699 96	\$104,638 48	\$270,908 44	\$6,657 23	\$21,208 29	\$628 05	\$398,800 00	\$221,948 64	\$0 85	\$710 19
<i>Leased or Proprietary Roads.</i>										
Marquette, Houghton & Ontonagon Railroad.....	141,129 80	41,155 41	182,285 21	7,804 87	6,761 72	264 06	197,115 86	197,115 86	1 18	1,447 14
Marquette & Western Railroad.....	4,104 92		4,194 92	184 41	155 47		4,484 80	4,484 80	1 16	215 80
Total passenger department earnings.....	\$310,904 68	\$145,798 89	\$456,788 57	\$14,566 00	\$28,125 48	\$890 11	\$500,400 16	\$423,548 80	\$0 96	\$366 09

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## FREIGHT EARNINGS.

Roads.	Local Traffic.	Through Traffic.	Total Traffic.	Other Sources.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
Main line and branches.....	\$151,646 88	\$399,317 23	\$421,164 11	\$3,908 40	\$425,067 51	\$315,740 14	\$0 73	\$1,010 31
<i>Leased or Proprietary Roads.</i>								
Marquette, Houghton & Ontonagon Railroad.....	92,795 95	894,269 55	917,065 50	5,048 48	922,143 98	922,143 98	1 59	6,770 01
Marquette & Western Railroad.....	13,401 07	72,014 27	85,415 34		85,415 34	85,415 34	1 28	4,100 60
Total freight department earnings.....	\$258,048 90	\$1,165,601 05	\$1,423,674 95	\$8,951 88	\$1,432,626 83	\$1,323,299 46	\$1 17	\$2,479 58

Total transportation earnings,	-	-	-	-	-	\$1,933,026	99
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Transportation earnings per mile of road,	-	\$3,345	67
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Transportation earnings per train mile,	-	1	10
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Miscellaneous receipts from operating account,  
other than for transportation, as follows:

From rentals of tracks or terminals, M., H. & O.,	\$2,000	00
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From other sources,	{	D., S. S. & A.,	-	-	29,663	84
		M., H. & O.,	-	-	4,263	56
		M. & W.,	-	-	7,395	99
					\$43,323	39

Total,	-	-	-	-	-	\$43,323	39	\$43,323	39
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Distribution of miscellaneous earnings between main line and leased or  
proprietary roads:

COMPANY.	Total Miscellaneous.	Proportion for Michigan.
Duluth, South Shore & Atlantic R'y,	\$29,663 84	\$23,134 48
Marquette, Houghton & Ontonagon R. R.,	6,263 56	6,263 56
Marquette & Western R. R.,	7,395 99	7,395 99

Total earnings from operation of road,	-	-	-	\$1,976,350	38
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Total earnings per mile of road,	-	-	-	\$3,420	65
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Total earnings per train mile,	-	-	-	1	13.4
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Proportion of taxable earnings for Michigan,	-	-	-	1,746,848	26
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Total taxable earnings per mile of road in	
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Michigan,	-	-	-	\$3,720	26
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Income other than from earnings,	-	-	-	-	2,838	00
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Total income from all sources,	-	-	-	-	\$1,979,188	38
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Proportion of income for Michigan,	-	-	-	-	1,749,686	26
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#### ANALYSIS OF EXPENSES.

##### CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track,	-	-	-	-	\$147,799	84
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Renewals of rails,	-	-	-	-	7,990	53
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Renewals of ties,	-	-	-	-	18,059	40
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Repairs of bridges, including culverts and cattle guards,	-	-	-	-	7,388	45
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Repairs of fences, road crossings and signs,	-	-	-	-	6,269	84
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Repairs of buildings,	-	-	-	-	20,384	22
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Total,	-	-	-	-	\$207,892	28
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##### CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives,	-	-	-	-	\$53,720	37
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Repairs of passenger cars,	-	-	-	-	16,697	63
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Repairs of freight cars,	-	-	-	-	74,356	49
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Total,	-	-	-	-	\$144,774	49
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##### CLASS 3.—Conducting Transportation.

Fuel for locomotives,	-	-	-	-	\$167,827	78
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Water supply,	-	-	-	-	13,027	44
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Oil and waste, - - - - -	\$6,886 52
Locomotive service, - - - - -	123,670 43
Passenger train service, - - - - -	22,166 15
Passenger train supplies, - - - - -	4,278 64
Mileage of passenger cars, - - - - -	6,280 60
Freight train service, - - - - -	106,791 29
Freight train supplies, - - - - -	6,489 56
Telegraph expenses (maintenance and operating), - - - - -	24,119 71
Damage and loss of freight and baggage, - - - - -	967 16
Damages to property and cattle, - - - - -	7,730 34
Personal injuries, - - - - -	4,974 58
Agents and station service, - - - - -	138,167 66
Station supplies, - - - - -	4,639 09
<b>Total, - - - - -</b>	<b>\$637,516 95</b>

## CLASS 4.—General Expenses.

Salaries of the general officers of the company, - - - - -	\$34,044 80
Salaries of clerks in general offices, - - - - -	34,681 95
Law expenses, - - - - -	10,958 86
Insurance, - - - - -	10,650 17
Stationery and printing, - - - - -	17,010 14
Outside agencies and advertising, - - - - -	8,438 55
Contingencies, - - - - -	18,590 84
Taxes, - - - - -	36,956 25
<b>Total, - - - - -</b>	<b>\$171,331 56</b>

## RECAPITULATION OF EXPENSES.

	Per cent of Expenses.	
Maintenance of way and buildings, - - - - -	17.56	\$207,892 28
Maintenance of motive power and cars, - - - - -	12.23	144,774 49
Conducting transportation, - - - - -	53.85	637,516 95
General expenses, including taxes, - - - - -	16.36	171,331 56
<b>Total operating expenses and taxes, - - - - -</b>	<b>100.00</b>	<b>\$1,161,515 28</b>

Operating expenses and taxes per mile of road, \$2,010 34  
 Operating expenses and taxes per train mile run,  
 for trains earning revenue,—1,742,753 miles, 66.7  
 Proportion of operating expenses and taxes for  
 Michigan:  
 Main line, - - - - - 428,213 37

## Leased or Proprietary Roads.

Marquette, Houghton & Ontonagon Railroad, 563,165 54  
 Marquette & Western Railroad, - - - - - 47,781 66

**Total proportion of expenses for Michigan, - - - - - \$1,039,160 57**  
 Percentage of expenses to earnings,—59.90.  
 Net earnings per mile of road, - - - - - \$1,410 31  
 Net earnings per train mile, - - - - - 46.7

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From St. Ignace to Marquette, December 19, 1881.

From Sault St. Marie to Soo Junction, October 10, 1887.

From Nestoria to Duluth, September 16, 1888.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Sault St. Marie to Marquette,	153.81	
In Michigan, from St. Ignace to Soo Junction,	42.97	
In Michigan, from Nestoria to Wisconsin State Line,	101.59	
In Wisconsin, from State Line to Iron River Junction,	64.24	
In Wisconsin, from Atlantic Junction to West Superior,	3.74	
Total length completed,		366.35

## BRANCHES.

Macinaw Lumber, from Mill to St. Ignace,	.59	
Martel, from Furnace to St. Ignace,	1.54	
Ozark, from Kilns to Ozark,	.52	
Anna River, from Hallston to Anna River brickyards,	.88	
Prison, from S. Marquette to Prison,	.40	
Palmer, from Negaunee to Volunteer and Grand Rapids Mines,	7.01	
Metropolis, from Erie Branch M. H. & O., to North Republic Mine,	.61	
Riverside, from Erie Branch M. H. & O., to Riverside Mine,	.60	
Reduction Works, from W. Republic branch M. H. & O., to Republic,	.75	
Wetmore, from Wetmore branch M. H. & O., to Upper Mine,	.51	
Dotys, from Doty Junction M. H. & O., to Dishno Kilns,	.73	
*Bessemer, from Bessemer Junction to Ironwood,	5.92	
Total length of branches owned by company,		20.06
Total length of branches owned by company in Michigan,	20.06	
Total length of road belonging to this company,		386.41
Total length of road belonging to this company in Michigan,	318.43	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,	47.09	
Aggregate length of tracks in Michigan belonging to this company, computed as single track,		365.52
Gauge of track, 4 feet 8½ inches.		

\*Not yet under operation.

*Proprietary or Leased Roads Operated by this Company.*

Total Miles. In Michigan.

Name description, and length of each:

Marquette, Houghton and Ontonagon Railroad, main line, - - - - -	94.70	
Branches, - - - - -	39.73	134.43
Marquette & Western Railroad, main line, - - - - -	18.11	
Branches, - - - - -	2.72	20.83
Chicago & North Western Railway, - - - - -	1.51	1.51
Milwaukee & Northern Railroad, - - - - -	.27	.27
Northern Pacific Railroad, - - - - -	38.47	
Lake Superior, Terminal & Transfer Railway, - - - - -	.72	
St. Louis River Bridge, - - - - -	1.05	
Total, - - - - -	197.28	157.04
Total miles operated by the company, - - - - -	577.77	469.55

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of	153; aggregate length, feet,	14,996
Iron bridges, number of	7; aggregate length, feet,	480
Wooden trestles, number of	34; aggregate length, feet,	7,963
Total, - - - - -	194; - - - - -	23,439

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Minneapolis, St. Paul & S. S. Marie Railway at Trout Lake,	1
Manistique Railway Co., west of Seney,	1
Chicago & Northwestern Railway west of Negaunee,	1
Chicago & Northwestern Railway at South Jackson,	1
Chicago & Northwestern Railway at Buffalo,	1
Chicago & Northwestern Railway at South Buffalo,	1
Chicago & Northwestern Railway at Lucy Mine,	2
Chicago & Northwestern Railway at Negaunee, near station,	1
Chicago & Northwestern Railway at Barnum Mine,	1
Chicago & Northwestern Railway at St. Lawrence Mine,	1
Chicago & Northwestern Railway at Lake Angeline,	1
Chicago & Northwestern Railway at Winthrop Branch,	3
Chicago & Northwestern Railway at Boston Branch,	1
Chicago & Northwestern Railway at Dishno Branch,	1
Chicago & Northwestern Railway at Republic Branch,	1
Chicago & Northwestern Railway at Michigamme, main line,	1
Chicago & Northwestern Railway at Michigamme, mill tracks,	2
Chicago & Northwestern Railway at Palmer Branch,	2
Milwaukee & Northern Railroad at Champion,	1
Milwaukee & Northern Railroad at Republic,	1
Milwaukee & Northern Railroad at West Republic,	1
Milwaukee & Northern Railroad at Republic Mine,	1
Marquette & Western Railroad at Negaunee station,	2
M. H. & O. Railroad at Lake Street Branch,	3

What railroads cross your road either over or under your grade in this State, and where?

Over,—

Chicago & Northwestern Railroad at one mile east of Champion.

Under,—

Chicago & Northwestern Railroad at Negaunee.

At what crossings are interlocking and derailing switches in operation?

Chicago & Northwestern Railway at Republic, - - - 1

Milwaukee & Northern Railroad at Republic, - - - 1

Chicago & Northwestern Railway at Michigamme, - - - 1

What pattern or patterns have you adopted?

At Republic,—Union Switch and Signal Company's.

At Michigamme,—The Randolph Interlocking and Derailing Machine.

Number of crossings of highways at grade in this State, - 155

Number of crossings of highways at grade in this State at which there are gates or flagmen, - 21

Number of crossings of highways over or under railroad, Over,—2, under,—11, - 13

Number of highway bridges 18 feet above track, - 2

Number of highway bridges less than 18 feet above track, - None.

Have safety guards been erected at over-head obstructions, - Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883, - Yes.

How are they treated? Plank blocks fitted to space and renewed as required.

#### *Stations.*

Number of stations on whole line, - - - - - 86

Same in Michigan, - - - - - 72

#### *Employés.*

Number persons regularly employed on all roads operated by company, including officials, - - - - - 1,389

Same in Michigan, - - - - - 1,331

Classify your employés as per following list:

	NUMBER.
Baggagemen, - - - - -	14
Brakemen, - - - - -	79
Conductors, - - - - -	40
Engineers, - - - - -	55
Firemen, - - - - -	56
Laborers, - - - - -	596
Shopmen, - - - - -	207
Yardmen, - - - - -	70
Others, - - - - -	272

#### REPAIRS AND RENEWALS.

##### *Fencing in Michigan.*

How many miles of fencing have you? - - - - - 75

Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed:



Mackinaw, - - - - -	51
Chippewa, - - - - -	130
Luce, - - - - -	58
Schoolcraft, - - - - -	46
Alger, - - - - -	68
Marquette, - - - - -	103
Baraga, - - - - -	118
Houghton, - - - - -	59
Ontonagon, - - - - -	76
Gogebic, - - - - -	50

Total miles required, - - - - - 759

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	77
Average length of sections—miles, - - - - -	6
Average number of men in each section gang, - - - - -	5
Number of new ties put in whole line during the year, - - - - -	75,000
Number of new ties put in track in Michigan, - - - - -	73,000
Average number of new ties per mile of road, - - - - -	178

New rails put in track:—

Steel (760 tons), 8.25 miles.	
Total miles of track laid with new rails, - - - - -	8.25

*Bridges and Culverts.*

New bridges built during the year,—number - - - - - None.

ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	100	\$666,778 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	12	40,643 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender, - - - - -	1	1,940 00
Total, - - - - -	113	\$709,361 00
Number of passenger cars—12 wheel, including official cars, - - - - -	1	16,000 00
Number of passenger cars—8 wheel, including official cars, - - - - -	44	183,967 00
Number of express and baggage cars, - - - - -	13	36,540 00
Number of box freight cars, - - - - -	810	396,562 50
Number of platform cars, - - - - -	770	291,306 00
Number of ore cars, - - - - -	4,046	807,567 00
Number of conductors' way cars, - - - - -	52	38,718 00
Other cars as follows:		
Number of charcoal cars, - - - - -	24	8,648 00
Derricks, - - - - -	3	1,410 00
Lorries, - - - - -	156	4,869 20
Total, - - - - -	5,919	\$2,494,948 70

Number of locomotives equipped with power brakes, 75  
 Number of passenger-train cars equipped with power brakes, 58  
 Number of freight cars equipped with power brakes, None.  
 What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse automatic air brake 29 locomotives; American steam brake 46 locomotives; Westinghouse automatic air brake 58 passenger cars.  
 Are your freight cars being equipped with automatic couplers as required by Act. No. 147, Session Laws of 1885? Yes.  
 What pattern or patterns have you adopted for use? Safford.  
 How are your passenger cars heated? Mason and Baker heaters.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year,	-	-	519,971
Miles run by freight trains during the year,	-	-	1,222,782
Total mileage of trains earning revenue,	-	-	1,742,753

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried,	39,353		
Number of local passengers carried,	312,579		
Total number of passengers carried,	351,932		
Total passenger mileage, or passengers carried one mile,		13,720,911	
Average distance traveled by each passenger,			38.9
Average amount received from each passenger,			\$1 30.00
Average rate of fare per mile for through passengers,			03.40
Average rate of fare per mile for local passengers,			03.00
Average rate of fare per mile for all passengers,			03.30

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	1,712,672		
Number of tons of local freight carried,	342,785		
Total tons of freight carried,	2,055,457		
Total mileage of through freight,		74,039,703	
Total mileage of local freight,		19,665,597	
Total freight mileage, or tons carried one mile,		93,705,300	
Average ton haul for through freight,			43.2305
Average ton haul for local freight,			57.3701
Average ton haul for all freight,			45.5885

	Rate.
	Dollars. Cents.
Average amount received for each ton haul,	\$0 69.00
Average rate per ton per mile, received for through freight,	01.60
Average rate per ton per mile, received for local freight,	01.30
Average rate per ton per mile, received for all freight,	01.50

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	8,495
Flour,	8,504
Provisions (beef, pork, lard, etc.),	1,992
Animals,	2,293
Other agricultural products,	8,580
Lumber and forest products,	222,946
Coal,	66,655
Plaster, lime and cement,	3,456
Salt,	212
Petroleum,	2,098
Railroad iron, iron and steel rails,	23,190
Pig and bloom iron,	32,918
Other iron and castings,	3,740
Ores,	1,520,886
Stone, brick and sand,	21,381
Manufactures,—articles shipped from point of production,	13,827
Merchandise and other articles not enumerated above,	76,819
Total forwarded,	2,017,992

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain,	23,017	1.120
Flour,	10,752	.523
Provisions (beef, pork, lard, etc.),	1,997	.097
Animals,	2,547	.124
Other agricultural products,	10,876	.529
Lumber and forest products,	236,559	11.509
Coal,	66,655	3.243
Plaster, lime and cement,	3,456	.168
Salt,	212	.010
Petroleum,	2,098	.102
Railroad iron, iron and steel rails,	23,234	1.131
Pig and bloom iron,	32,918	1.601
Other iron and castings,	3,740	.182
Ores,	1,520,886	73.993
Stone, brick and sand,	21,381	1.040
Manufactures,—articles shipped from point of production,	13,880	.675
Merchandise and other articles not enumerated above,	81,249	3.953
Total tons carried,	2,055,457	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company does a general business. For a tonnage equal to 5,844 pounds carried 410 miles daily the remuneration is \$1,875.00 per month; tonnage carried less than 410 miles is reduced to tonnage carried 410 miles; excess is paid at proportionate rate; contract dated December 15, 1889; previously  $1\frac{1}{2}$  times first-class freight rates; freight is delivered at depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Marquette, Houghton & Ontonagon railroad,	-	-	105
Marquette & Western railroad,	-	-	13
Western Union Telegraph Co., used jointly,	-	-	365
Total miles,	-	-	483

*Transportation Companies.*

## SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Wagner Palace Car Co., of New York City, amount paid \$6,274.27.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

February 20, Patrick McBride, woodman, Newberry. Attempted to board a moving train while intoxicated.

March 19, Frank La Londe, laborer, Au Train. Attempted to board a moving train while intoxicated.

July 16, Michal Higgins, ore trimmer, Marquette. Wrestling and fell in front of moving train.

August 9, John Whinter, laborer, Marquette. Intoxicated and run over by train.

August 13, Frank Mangan, lumberman, St. Ignace. Intoxicated and run over by train.

August 31, Louis Litzner, farm laborer, Allenville. Hand car lever broke his neck; accidental.

September 24, Richard Smith, section laborer, Thomaston. Caught on bridge with hand car by train: accidental.

November 1, John Murphy, brakeman, Champion. Fell from train; carelessness.

November 21, Charles Reinhardt, engineer, Marquette. Runaway train; lack of caution.

December 16, John Breen, lumberman, Ewen. Found dead on track.

December 21, Herman Luthihern, laborer, Newberry. Intoxicated and struck by train.

#### INJURED.

January 13, John Pessier, brakeman, Onata. Coupling.

February 18, John Cameron, teamster, Eckerman. Car got away from brakeman and collided with car where this man was unloading horses; accidental.

March 29, Gust. Autus, section laborer, East Branch. Thrown from hand car; accidental.

April 12, James Stack, locomotive fireman, Trout Creek. Cleaning engine ash pan when engineer started engine; accidental.

May 2, Octave Oyotte, switchman, Marquette. Fell from car; carelessness.

May 7, Edw. Lafiniere, brakeman, Humbolt. Coupling; carelessness.

May 31, Mike Bunneau, Indian, Sault St. Marie. Struck by train; lack of caution.

May 23, James McCombs, sectionman, East Branch. Rail thrown against his leg; accidental.

June 26, John McCormick, laborer, Ishpeming. Attempted to board moving train; carelessness.

July 15, William Mianis, lumberman, Hill Creek. Getting off moving train; carelessness.

September 26, John McDonald, carpenter, Kitchi. Struck by plank that fell from bridge; carelessness.

November 21, George LaLiberty, fireman, Marquette. Runaway train; lack of caution.

November 21, Adolph Demerest, brakeman, Marquette. Runaway train; lack of caution.

#### TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....					2	
Derailments.....		1			2	
Falling from trains.....		1			1	
Frogs.....						
Getting on and off trains.....	2					2
Highway crossings.....						
Miscellaneous.....		1	1		4	1
Overhead obstructions.....						
Trespassers on trains.....			5			1
Trespassers on tracks.....						
Total.....	2	3	6		9	4

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	- - -	11
Number of persons injured during the year,	- - -	13
Number of casualties purely accidental,	- - -	6
Number resulting from lack of caution, carelessness, or misconduct,	- - -	18
Persons killed or injured while intoxicated,	- - -	8
Trespassers and tramps killed or injured,	- - -	6
Suicides,	- - -	—

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

Employés.	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....	1	3	4
Conductors.....			
Engineers.....	1		1
Firemen.....			2
Laborers.....			2
Shopmen.....			
Yardmen.....		1	1
Not classified above.....		1	1
Total.....	2	9	11

STATE OF NEW YORK, }  
COUNTY OF NEW YORK, } ss.

James McMillan, President, and W. A. C. Ewen, Treasurer, of the Duluth, South Shore & Atlantic Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,  
JAMES McMILLAN.  
W. A. C. EWEN.

Subscribed and sworn to before me this 27th day of March, A. D. 1890, by W. A. C. Ewen, Treasurer.

WILLIAM H. CLARISON,  
*Commissioner for Michigan in New York.*

Subscribed and sworn to before me this 2d day of April, A. D. 1890, by James McMillan, President.

WILLIAM R. BATES,  
*Commissioner for Michigan in the District of Columbia.*

ANNUAL REPORT  
OF THE  
MARQUETTE, HOUGHTON & ONTONAGON RAILROAD  
COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 17, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JAMES McMILLAN, Detroit, Mich.

*Secretary*, L. M. SCHWAN, New York City.

*Treasurer*, W. A. C. EWEN, New York City.

*Transfer Agent*, A. O. BEEBE, New York City.

DIRECTORS.

JAMES McMILLAN, Detroit, Mich.

HUGH McMILLAN, Detroit, Mich.

CALVIN S. BRICE, New York City.

GEO. I. SENEY, New York City.

EDWARD TUCK, New York City.

HENRY W. CANNON, New York City.

GEO. H. CHURCH, New York City.

GRANT B. SCHLEY, New York City.

CHAS. H. JOHNSON JR., New York City.

Terms expire July 18, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—September 2, 1872.

Number of stockholders at date of last election, - - - - - 202

Number of stockholders in Michigan at same date, - - - - - 10

Amount of full paid stock held in Michigan at same date, —2,285 shares.

Date of annual meeting of stockholders,—Third Thursday of July.

Fiscal year of company ends, December 31.

General offices of the company are located at Marquette, Mich., and 10 Wall St. N. Y.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	-	\$5,657,126 67
Par value of shares,	- - - \$100	
Average price received per share,	- - - 100	
No. of shares issued,	- - - 57,571	
Amount paid in on common,	- - - \$2,378,670 67	
Amount paid in on preferred,	- - - 3,278,456 00	
Total amount paid in, as per books of the company,	-	\$5,657,126 67
Paid in per mile of road owned by company,		
—155.26 miles,	- - - - -	\$36,436 47

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount Outstanding.
M., H. & O., May 25, 1872.....	8%	June 1, 1903.....	New York.....	\$1,890,500 00
M., H. & O., March 1, 1878.....	6%	March 1, 1908.....	New York.....	576,200 00
M., H. & O., May 1, 1889.....	6%	June 1, 1923.....	New York.....	1,500,000 00
M., H. & O., April 1, 1886.....	6%	April 1, 1925.....	New York.....	1,400,000 00
Total funded debt.....				\$4,856,700 00

## UNFUNDED DEBT.

Unfunded Debt, - - - - - None.

## RECAPITULATION.

Total funded debt,	- - - - -	\$4,856,700 00
Total debt liabilities,	- - - - -	\$4,856,700 00
Amount of debt liabilities per mile of road,—155.26 miles,		31,281 08
Total amount of stock and debt,	- - - - -	\$10,513,826 67
Stock and debt per mile of road,—155.26 miles,	- - - - -	67,717 55

## INTEREST ON THE FUNDED DEBT.

What is the amount due each year,—For 1889, - - - \$319,352 00  
 Was it paid for the last year? Yes.



## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment,	\$8,624,347 15
Average cost per mile of road, not including sidings, 155.26 miles,	55,547 77
Proportion of cost of construction for Michigan,	8,624,347 15

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

Marquette to Houghton, July, 1883.

Humbolt to Republic, September, 1882.

## MAIN LINE.

	Miles, 100ths.	Miles, 100ths.
Length completed in Michigan,	94.70	
Total length completed,		94.70

## BRANCHES.

Boston, from Boston Junction to Boston & American Mines,	2.06
Beaufort, from Beaufort Junction to Beaufort & Titan Mines,	1.76
Buffalo, from M. & W. R. R. to Buffalo, South Buffalo & Queen Mines,	.58
Champion, from Champion Junction to Champion,	1.03
Detroit Brownstone, from M. & W. R. R. to Detroit & Marquette Brownstone quarry,	.98
Dexter, from Dexter Junction to Dexter Consolidated Mine,	2.60
Eagle Mill, from M. & W. R. R. connecting with M. H. & O.,	.62
Erie, from Republic to Erie & Magnetic Mines,	4.90
Hartford, from M. & W. R. R. to Hartford Mine, we own one-half jointly with C. & N. W.,	.19
Iron Valley, from M. & W. R. R. to Iron Valley Mines,	.45
Lake Street, from D. S. S. & A. R'y near Garden St. to Lighthouse Point,	1.47
L'Anse, from L'Anse Junction to end Merchandise pier,	.78
Linden, from Linden Junction to Linden Brownstone quarry,	.30
Michigamme, from Michigamme to Read's Mills,	1.00

	Miles. 100ths.	Miles. 100ths.
Milwaukee, from Negaunee to Lucy Rolling		
Mill and Milwaukee Mines, - - - - -	2.70	
Negaunee, from M. & W. R. R. to Negaunee		
Mine, we own one-half jointly with C. &		
N. W. R'y, - - - - -	.38	
Northampton, from Northampton Junction		
to Pasco Mine, - - - - -	2.47	
North Jackson, from M. & W. R. R. to		
North Jackson Mine, - - - - -	.18	
Norwood, from Beaufort branch to Nor-		
wood Mine, - - - - -	.50	
Republic, from Humbolt to Republic Mine		
yard, - - - - -	8.70	
Republic yard, from Republic to end of		
Mine yard, we own one-third jointly with		
C. & N. W. R'y and M. & N. R. R., - - -	.27	
Saginaw, from Winthrop Junction to Sag-		
inaw Mine, - - - - -	.85	
Taylor, from Taylor Junction to Taylor		
Mine, - - - - -	.22	
Wetmore, from Spurr Junction to Wetmore		
Mine, - - - - -	.56	
Webster, from Wetmore branch to Webster		
Mine, - - - - -	.53	
West Republic, from Erie branch to West		
Republic Mine, - - - - -	1.06	
Winthrop upper, from Winthrop branch to		
Brasted Mines, we own one-half jointly		
with C. & N. W. R'y, - - - - -	.66	
Winthrop lower, from Winthrop Junction		
to Winthrop & Mitchell Mines, - - -	1.93	
Total length of branches,—miles, - - -	39.73	
Total length of branches owned by company, - - -		39.73
Total length of branches owned by company in		
Michigan, - - - - -	39.73	
Total length of road belonging to this company, - - -		134.43
Total length of road belonging to this company in		
Michigan, - - - - -	134.43	
Aggregate length of sidings, spurs, and other		
tracks not above enumerated, - - - - -		40.26
Same in Michigan, - - - - -	40.26	
Aggregate length of tracks belonging this company,		
computed as single track, - - - - -		174.69
Same in Michigan, - - - - -	174.69	
Gauge of track, 4 feet 8½ inches.		

STATE OF NEW YORK, }  
COUNTY OF NEW YORK, } ss.

James McMillan, President, and L. M. Schwan, Secretary, of the Marquette, Houghton & Ontonagon Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ] Signed, JAMES McMILLAN, *President.*  
L. M. SCHWAN, *Secretary.*

Subscribed and sworn to before me this 27th day of March, A. D. 1890, by  
L. M. Schwan, Secretary.

WILLIAM H. CLARKSON,  
*Commissioner for Michigan in New York.*

Subscribed and sworn to before me this 2d day of April, A. D. 1890, by  
James McMillan, President.

WILLIAM R. BATES,  
*Commissioner for Michigan in the District of Columbia.*

ANNUAL REPORT  
OF THE  
MARQUETTE & WESTERN RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 17, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JAMES McMILLAN, Detroit, Mich.  
*Secretary*, L. M. SCHWAN, New York City.  
*Treasurer*, W. A. C. EWEN, New York City.  
*Transfer Agent*, A. O. BEEBE, New York City.

DIRECTORS.

JAMES McMILLAN, Detroit, Mich.  
CALVIN S. BRICE, New York City.  
GEO. I. SENEY, New York City.  
EDWARD TUCK, New York City.  
S. F. SULLIVAN, New York City.  
GRANT B. SCHLEY, New York City.  
HENRY W. CAMERON, New York City.

Terms expire July 18, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—October 12, 1883.

Number of stockholders at date of last election, - - - - - 8

Date of annual meeting of stockholders,—Third Thursday of July.

Fiscal year of company ends December 31.

General offices of the company are located at Marquette, Mich., and 10 Wall St. N. Y.

REMARKS.

All Marquette & Western Railroad bonds have been destroyed and the mortgages discharged. In their place a new mortgage has been created, M. & W. joining, and the bonds of the M. H. & O. R. R. Co., issued. All the M. & W. shares are in the treasury of the M. H. & O. R. R.. The M. & W. is to be operated perpetually by the M. H. & O. R. R. or its assigns. Possession was given in May 1885.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$1,250,000 00
Par value of shares, - - - - \$100 00	
Average price received per share, 100 00	
No. of shares issued, - - - - 12,500	
Amount paid in on common, - - - - \$625,000 00	
Amount paid in on preferred, - - - - 625,000 00	

Total amount paid in, as per books of the company, - \$1,250,000 00

Paid in per mile of road owned by company,—miles, 20.83, - - - - \$60,009 60

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt, - - - - - None.

## UNFUNDED DEBT.

Unfunded debt, - - - - - None.

## DESCRIPTION OF ROAD:

Date when the road was opened for use between its present termini:  
June, 1884.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan, - - - -	18.11	
Total length completed, - - - -		18.11

## BRANCHES.

Teal Lake, from C. & N. W. crossing to Detroit mine, - - - -	2.09	
Lake Angeline, from Ishpeming to Lake Angeline, - - - -	.63	
Total length of branches,—miles, - - - -	2.72	
Total length of branches owned by company, - - - -		2.72
Total length of branches owned by company in Michigan, - - - -	2.72	
Total length of road belonging to this company, - - - -		20.83
Total length of road belonging to this company in Michigan, - - - -	20.83	
Aggregate length of sidings, spurs, and other tracks not above enumerated, - - - -		8.85
Same in Michigan, - - - -	8.85	
Aggregate length of tracks belonging to this company, computed as single track, - - - -		29.68
Same in Michigan, - - - -	29.68	
Gauge of track, 4 feet 8½ inches.		

STATE OF NEW YORK, }  
COUNTY OF NEW YORK, } ss.

James McMillan, President, and L. M. Schwan, Secretary, of the Marquette & Western Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt and other matters therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

**JAMES McMILLAN, *President.***

L. M. SCHWAN, *Secretary.*

Subscribed and sworn to before me this 27th day of March, A. D. 1890, by  
L. M. Schwan, Secretary.

WILLIAM H. CLARKSON,

*Commissioner for Michigan in New York.*

Subscribed and sworn to before me this 2d day of April, A. D. 1890, by  
James McMillan, President.

WILLIAM R. BATES,

*Commissioner for Michigan in the District of Columbia.*

ANNUAL REPORT  
OF THE  
TOLEDO, ANN ARBOR & NORTH MICHIGAN RAILWAY  
COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 23, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JAMES M. ASHLEY, Toledo, Ohio.  
*First Vice President*, ALMA W. WRIGHT, Alma, Mich.  
*Second Vice President and General Manager*, HENRY W. ASHLEY, Toledo, O.  
*Secretary*, C. F. COOK, Toledo, Ohio.  
*Asst. Secretary*, F. S. CHANDLER, Toledo, Ohio.  
*Auditor*, GEORGE B. PARK, Toledo, Ohio.  
*Treasurer*, B. F. JERVIS, Toledo, Ohio.  
*Superintendent*, J. B. CONNERS, Owosso, Mich.  
*Superintendent of Telegraph*, J. B. CONNERS, Owosso, Mich.  
*Cashier*, J. M. MELICK, Toledo, Ohio.  
*General Passenger Agent*, A. J. PAISLEY, Toledo, Ohio.  
*General Freight Agent*, W. H. BENNETT, Toledo, Ohio.  
*Attorney*, HUNTSBERGER & ASHLEY, Toledo, Ohio.

DIRECTORS.

J. M. ASHLEY, Toledo, Ohio.  
 A. W. WRIGHT, Alma, Mich.  
 H. W. ASHLEY, Toledo, Ohio.  
 JOHN CUMMINGS, Toledo, Ohio.  
 T. W. CHILD, Toledo, Ohio.  
 WILLIAM BAKER, Toledo, Ohio.  
 DAVID ROBISON JR., Toledo, Ohio.  
 E. A. TODD, Owosso, Mich.  
 I. A. FANCHER, Mt. Pleasant, Mich.  
 J. M. ASHLEY JR., Toledo, Ohio.  
 S. DEAN, Ann Arbor, Mich.

Terms expire April 17, 1889.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—October 16, 1880, amended November 30, 1886.

Number of stockholders at date of last election, - - - - - 127

Number of stockholders in Michigan at same date, - - - - - 9  
 Amount of full paid stock held in Michigan at same date, - - - - - \$10,300  
 Date of annual meeting of stockholders—Third Wednesday in April each year.  
 Fiscal year of company ends,—December 31.  
 General offices of this company are located at Toledo, Ohio.

### GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -	- - - - -	\$1,014,306 98
Total expenses, including taxes, - - - - -	\$668,130 69	
Net income, - - - - -	- - - - -	346,176 29
Interest on funded debt, - - - - -	\$294,800 00	
Interest on unfunded debt, - - - - -	7,951 84	
Rentals of buildings, tracks, etc., - - - - -	10,122 94	
	\$312,874 78	
Balance for the year, - - - - -	- - - - -	\$33,301 51
Balance (profit and loss) last year, - - - - -	- - - - -	72,847 96
Balance forward to next year, - - - - -	\$106,149 47	
	\$106,149 47	\$106,149 47

### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$5,300,000 00
Par value of shares, - - - - -	\$100 00
No. of shares issued, - - - - -	53,000
Amount paid in on common, - - - - -	\$5,300,000 00
Total amount paid in as per books of the company, - - - - -	\$5,300,000 00
Paid in per mile of road owned by company	
—248 miles, - - - - -	\$21,370 96

### ANALYSIS OF DEBT ACCOUNTS.

#### FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
1st m't'g gold bond T., A. A. & G. T. Jan., 1880..	6%	1921.....	New York...	\$1,250,000 00
1st m't'g gold bond T., A. A. & N. M. May, 1885.	6%	1924.....	New York...	2,120,000 00
1st m't'g gold bond T., A. A. & M. P. Mar., 1887.	6%	1916.....	New York...	400,000 00
1st m't'g gold bond T., A. A. & C. Mar., 1887.....	6%	1917.....	New York...	1,250,000 00
Total funded debt.....				\$5,040,000 00



## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For Construction.....		
For Equipment.....	To be paid from earnings.....	\$267,268 24
For Real Estate.....		
For Renewals.....		
For Miscellaneous.....	To be paid from earnings.....	54,400 00
For Current Balances.....	To be paid from earnings.....	\$17,197 50
Total unfunded debt.....		\$688,865 74

## RECAPITULATION.

Total funded debt,	\$5,040,000 00
Total unfunded debt,	638,865 74
Total debt liabilities,	\$5,678,865 74
Amount of debt liabilities per mile of road,—248 miles,	22,898 65
Total amount of stock and debt,	\$10,978,865 74
Stock and debt per mile of road,—248 miles,	44,269 61

## GENERAL BALANCE SHEET.—Dr.

Construction account,	\$9,932,100 93	
Equipment account,	867,292 54	
		\$10,799,393 47
Cash items:		
Cash,	\$17,518 72	
Due from agents,	84,664 57	
		102,183 29
Other assets:		
Materials and supplies,	\$40,910 91	
Debit balances from companies and individuals,	142,527 54	
		183,438 45
Total,		\$11,085,015 21

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	\$5,300,000 00	
Funded debt,	5,040,000 00	
		\$10,340,000 00
Unfunded debt:		
Interest unpaid,	\$54,400 00	
Notes payable,	67,144 27	
Vouchers and accounts,	250,053 23	
Other liabilities:		
Car trust warrants,	267,268 24	
		638,865 74
Profit and loss or income accounts,		106,149 47
Total,		\$11,085,015 21

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment,	-	-	\$10,799,393	47
Average cost per mile of road, not including sidings,—				
248 miles,	-	-	43,545	94
Proportion of cost for Michigan,	-	-	10,581,663	72

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings,	-	-	-	-	-	\$11,557	19
New locomotives,	-	-	-	-	-	8,373	76
New cars,	-	-	-	-	-	159,305	15
Total,	-	-	-	-	-	\$179,236	10
Total charges to property account as above,						\$179,236	10
Property sold and credited,	-	-	-			385,300	00
Net credit to property account,	-	-	-	-	-	\$206,063	90

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Roads.	Local Fares.	Through Fares.	Total Passenger Fares.	Express and Baggage.	Mails.	Other Sources.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
Main line and branches.....	\$302,105 74	\$1,327 65	\$303,433 39	\$14,740 00	\$23,313 72	-----	\$340,386 11	\$235,539 60	\$0 81.33	\$369 80
<i>Leased or Proprietary Roads.</i>										
Toledo, Saginaw & Mackinaw Railway.....	23,100 63	-----	23,100 63	2,302 26	1,898 70	-----	27,241 59	27,241 59	49.32	694 93
Total passenger department earnings.....	\$325,206 36	\$1,327 65	\$326,534 01	\$17,042 26	\$24,051 42	-----	\$367,627 69	\$262,781 18	\$0 76.45	\$381 85

## FREIGHT EARNINGS.

Roads.	Local Traffic.	Through Traffic.	Total Traffic.	Other Sources.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
Main line and branches.....	\$549,899 99	\$38,915 23	\$578,304 62	\$23,539 83	\$606,844 50	\$594,609 73	\$1 56.11	\$2,446 95
<i>Leased or Proprietary Roads.</i>								
Toledo, Saginaw & Mackinaw Railway.....	23,397 30	54,568 69	77,990 99	566 60	78,557 59	76,537 59	2 94.56	2,004 02
Total freight department earnings.....	\$572,786 99	\$83,506 93	\$656,396 61	\$29,106 43	\$685,402 09	\$671,167 32	\$1 65.00	\$2,386 50

Total transportation earnings,	-	-	-	-	\$953,029 78
Transportation earnings per mile of road,	\$3,318 34				
Transportation earnings per train mile,	1 24.50				
Miscellaneous receipts from operating account, other than for transportation, as follows:					
From telegraph,	992 89				
From rentals of tracks or terminals,	57,239 95				
From other sources,	3,044 36				
Total,	-	-	-	-	\$61,277 20

Distribution of miscellaneous earnings between main line and leased or proprietary roads:

COMPANY.	Total Miscellaneous.	Proportion for Michigan.
Toledo, Ann Arbor & North Michigan R'y,	\$61,277 20	\$60,041 77
Total earnings from operation of road,	- - -	\$1,014,306 98
Total earnings per mile of road, - -	\$3,531 71	
Total earnings per train mile, - -	1 32.5	
Proportion of taxable earnings for Michigan,	- - -	995,990 21
Total taxable earnings per mile of road in Michigan, - - - - -	\$3,529 37	
Total income from all sources, - - - -	- - - -	\$1,014,306 98
Proportion of income for Michigan, - - - -	- - - -	996,648 44

#### ANALYSIS OF EXPENSES.

##### CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track,	-	-	-	-	\$91,611 57
Renewals of ties,	-	-	-	-	6,039 55
Repairs of bridges, including culverts and cattle guards,	-	-	-	-	8,542 30
Repairs of fences, road crossings, and signs,	-	-	-	-	10,757 86
Repairs of buildings,	-	-	-	-	21,975 58
Total,	-	-	-	-	\$138,926 86

##### CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives,	-	-	-	-	\$38,744 03
Repairs of passenger cars,	-	-	-	-	17,929 87
Repairs of freight cars,	-	-	-	-	43,661 55
Total,	-	-	-	-	\$100,335 45

##### CLASS 3.—Conducting Transportation.

Fuel for locomotives,	-	-	-	-	\$113,506 31
Water supply,	-	-	-	-	3,422 51.
Oil and waste,	-	-	-	-	5,043 80

Locomotive service, - - - - -	\$52,796 95
Passenger train service, - - - - -	15,941 33
Passenger train supplies, - - - - -	1,440 94
Freight train service, - - - - -	40,968 29
Freight train supplies, - - - - -	812 99
Mileage of freight cars, - - - - -	38,792 43
Telegraph expenses (maintenance and operating), - - - - -	14,612 79
Damage and loss of freight and baggage, - - - - -	750 02
Damages to property and cattle, - - - - -	2,780 71
Personal injuries, - - - - -	4,083 35
Agents and station service, - - - - -	56,606 53
Station supplies, - - - - -	2,260 99
<b>Total, - - - - -</b>	<b>\$353,819 94</b>

## CLASS 4.—General Expenses.

Salaries of the general officers of the company, - - - - -	\$11,962 50
Salaries of clerks in general offices, - - - - -	18,959 37
Law expenses, - - - - -	3,538 60
Insurance, - - - - -	2,320 07
Stationery and printing, - - - - -	11,583 74
Outside agencies and advertising, - - - - -	545 40
Contingencies, - - - - -	10,598 12
Taxes, - - - - -	15,540 64
<b>Total, - - - - -</b>	<b>\$75,048 44</b>

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - - - -	20.79	\$138,926 86
Maintenance of motive power and cars, - - - - -	15.02	100,335 45
Conducting transportation, - - - - -	52.96	353,819 94
General expenses, including taxes, - - - - -	11.23	75,048 44
<b>Total operating expenses and taxes, - - - - -</b>	<b>100.00</b>	<b>\$668,130 69</b>

Operating expenses and taxes per mile of road, - - - - -	\$2,326 36
Operating expenses and taxes per train mile run, - - - - -	87.2
for trains earning revenue,—765,428 miles, - - - - -	
Proportion of operating expenses and taxes for Michigan: - - - - -	
Main line, - - - - -	573,863 36

## Leased or Proprietary Roads.

Toledo, Saginaw & Mackinaw Railway, - - - - -	82,459 39
<b>Total proportion of expenses for Michigan, - - - - -</b>	<b>\$656,322 75</b>
Percentage of expenses to earnings,—65.87%. - - - - -	
Net earnings per mile of road, - - - - -	\$1,205 35
Net earnings per train mile, - - - - -	45.23

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Toledo, Ohio, to Cadillac, Michigan, August, 1888.

Toledo, Saginaw & Mackinaw railway:

From East Saginaw, Michigan, to Durand, Michigan, October, 1888.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Alexis (State line) to Cadillac, -	229.00	
In Ohio, from Toledo to Alexis, - - - -	5.00	
Total length completed, - - - -		234.00

## BRANCHES.

South Lyon, from Leland to South Lyon, - -	8.00	
Macon, from Macon to Quarry, - - - -	1.62	
St. Louis, from S. V. & St. L. crossing to St. Louis, -	1.38	
Ithaca, from main line to Ithaca, - - - -	1.75	
Alma, from main line to river, - - - -	1.25	
Total length of branches owned by this company, -		14.00
Total length of branches owned by company in Michigan, -	14.00	
Total length of road belonging to this company, -		248.00
Total length of road belonging to this company in Michigan, -	243.00	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated, - - -	33.00	
Aggregate length of tracks in Michigan belonging to this company computed as single track, - -	276.00	

Gauge of track, 4 feet 8½ inches.

*Proprietary or Leased Roads Operated by this Company.*

Name, description and length of each:

	Total Miles.	In Michigan.
Toledo, Saginaw & Mackinaw railway:		
East Saginaw to Durand, Michigan, - -	39.20	39.20
Total miles operated by the company, - -	323.20	315.20

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of, -	2;	aggregate length, feet, -	96
Combination bridges, number of, -	2;	aggregate length, feet, -	220
Wooden trestles, number of, -	192;	aggregate length, feet, -	10,665
Total, - - - - -	196;	- - - - -	10,981

*Draw Bridges in Michigan.*

How many on your line? None.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State and at what locality?

Lake Shore & Michigan Southern Railroad at Monroe Junction.

Lake Shore & Michigan Southern Railroad at Dundee.

Lake Shore & Michigan Southern Railroad at Pittsfield.

Wabash Railroad at Milan.

Detroit, Lansing & Northern Railroad at Howell Junction.

Detroit, Grand Haven & Milwaukee Railroad at Durand.

Chicago & Grand Trunk Railroad at Durand.

Detroit, Grand Haven & Milwaukee Railroad at Corunna.

Michigan Central Railroad at Owosso.

Saginaw Valley & St. Louis Railroad at St. Louis.

Flint & Pere Marquette Railroad at Clare.

Grand Rapids & Indiana Railroad at Cadillac.

What railroads cross your road either over or under your grade in this State, and where?

Under,—

Michigan Central Railroad at Ann Arbor.

At what crossings are interlocking and derailling switches in operation?

Crossing of the Detroit, Lansing & Northern Railroad at Howell Junction.

Crossing of the Flint & Pere Marquette Railroad at Clare.

Crossing of the Grand Rapids & Indiana Railroad at Cadillac.

What pattern or patterns have you adopted?

Union Switch & Signal, and Allentown.

Number of crossings of highways at grade in this State, - 232

Number of crossings of highways at grade in this State  
at which there are gates or flagmen, - - - - - 5

Number of crossings of highways over or under railroad:  
Over,—3. Under,—1 - - - - - 4

Number of highway bridges 18 feet above track, - - - - - 1

Number of highway bridges less than 18 feet above track, - - - - - 2

Have safety guards been erected at over-head obstructions, Yes.

Are your frogs and guard rails blocked as required by act  
174, session laws 1883? Yes.

How are they treated? Blocked with wood and firmly spiked to tie.

*Stations.*

Number of stations on whole line, - - - - -	77
Same in Michigan, - - - - -	74

*Employés.*

Number of persons regularly employed on all roads operated  
by company, including officials, - - - - - 894  
Same in Michigan, - - - - - 746

Classify your employés as per following list:

	Number.
Baggagemen, - - - - -	7
Brakemen, - - - - -	92
Conductors, - - - - -	39
Engineers, - - - - -	47
Firemen, - - - - -	46
Laborers, - - - - -	260
Shopmen, - - - - -	131
Yardmen, - - - - -	40
Others, - - - - -	232

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - - 426

Give the number of miles required to complete fence both  
sides of your track in Michigan, and the counties in  
which needed:

Clare, Osceola and Missaukee counties.

Total miles required, - - - - - 112

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	41
Average length of sections,—miles, - - - - -	7
Average number of men in each section gang, - - - - -	4
Number of new ties put in whole line during the year, - - - - -	41,178
Number of new ties put in track in Michigan, - - - - -	38,540
Average number of new ties per mile of road, - - - - -	127

*Bridges and Culverts.*

Amount of trestle work replaced with earth during the year, —linear feet, - - - - -	384
Timber culverts replaced during the year, - - - - -	7
With timber,—number, - - - - -	7
New bridges built during the year, - - - - -	4

Location.	Kind.	Material.	Month Built.	Feet in Length.
Shepherd, Michigan.....	Trestle.....	Wood.....	June.....	22
Campbell, Michigan.....	Trestle.....	Wood.....	July.....	42
Campbell, Michigan.....	Trestle.....	Wood.....	July.....	42
Alma, Michigan.....	Trestle.....	Wood.....	October.....	200
Total.....				316



## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender,	34	\$238,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender,	2	8,000 00
Total,	36	\$246,000 00
Number of passenger cars—8 wheel, including official cars,	13	45,500 00
Number of express and baggage cars,	9	27,000 00
Number of box freight cars,	681	187,000 00
Number of platform cars,	375	84,000 00
Number of conductors' way cars,	13	6,500 00
Other cars as follows:		
Tool cars, 4; derrick, 1; snow plows, 3; charcoal cars, 18,	26	21,200 00
Total,	1,117	\$617,200 00

Number of locomotives equipped with power brakes, 12  
 Number of passenger train cars equipped with power brakes, 13  
 Number of freight cars equipped with power brakes,—None.  
 What patterns of power brakes have you in use? Westinghouse automatic.  
 Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? No.  
 What pattern or patterns have you adopted for use? Have tried several patterns without satisfactory results.  
 How are your passenger cars heated? Baker heaters.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year,	349,251
Miles run by freight trains during the year,	412,951
Miles run by mixed trains,	3,226
Total mileage of trains earning revenue,	765,428

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Number of through passengers carried,	211		
Number of local passengers carried,	244,403		
Total number of passengers carried,	244,614		
Total passenger mileage, or passengers carried one mile,		8,159,255	
Average distance traveled by each passenger,		33.35	

	Miles.	Rate. Dollars. Cents.
Average amount received from each passenger, -	-	\$0 92.61
Average rate of fare per mile for through passengers, -	-	02.47
Average rate of fare per mile for local passengers, -	-	02.77
Average rate of fare per mile for all passengers, -	-	02.77

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents
Number of tons of through freight carried, -	46,841		
Number of tons of local freight carried, -	816,935		

Total tons of freight carried, - 863,776

Total mileage of through freight, -	-	7,700,111
Total mileage of local freight, -	-	57,198,439

Total freight mileage, or tons carried one mile, -	-	6,498,550
Average ton haul for through freight, -	-	164.3
Average ton haul for local freight, -	-	70.0
Average ton haul for all freight, -	-	75.1

Average amount received for each ton haul, -	-	\$0 75.90
Average rate per ton per mile, received for through freight, -	-	01.08
Average rate per ton per mile, received for local freight, -	-	01.00
Average rate per ton per mile, received for all freight, -	-	01.01

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain, . - - - - -	21,219
Flour, - - - - -	5,936
Provisions (beef, pork, lard, etc.), - - - - -	805
Animals, - - - - -	5,289
Other agricultural products, - - - - -	12,649
Lumber and forest products, - - - - -	191,676
Coal, - - - - -	19,433
Plaster, lime and cement, - - - - -	2,529
Salt, - - - - -	57,686
Petroleum, - - - - -	1,107
Railroad iron, iron and steel rails, - - - - -	3,651
Pig and bloom iron, - - - - -	152
Other iron and castings, - - - - -	3,846
Ores, - - - - -	161
Stone, brick and sand, - - - - -	7,913
Manufactures,—articles shipped from point of production, -	8,854
Merchandise and other articles not enumerated above, -	76,175
Total forwarded, - - - - -	419,081

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	32,942	3.80
Flour, - - - - -	27,656	3.20

	Tons.	Per Cent.
Provisions (beef, pork, lard, etc.),	816	.10
Animals,	5,394	.62
Other agricultural products,	28,029	3.25
Lumber and forest products,	205,477	23.79
Coal,	325,484	37.69
Plaster, lime and cement,	4,558	.53
Salt,	57,802	6.69
Petroleum,	5,384	.62
Railroad iron, iron and steel rails,	8,055	.93
Pig and bloom iron,	4,022	.47
Other iron and castings,	17,805	2.06
Ores,	1,200	.14
Stone, brick and sand,	12,922	1.49
Manufactures,—articles shipped from point of production,	14,899	1.73
Merchandise and other articles not enumerated above,	111,331	12.89
Total tons carried,	863,776	100.00

#### ADDITIONAL QUESTIONS.

##### *Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company. General freight taken at depots only. Fixed rate per month.

##### *Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Toledo, Ann Arbor & North Michigan Railway Company,	346
Toledo, Saginaw & Mackinaw Railway Company,	40
Total,	386

#### REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

##### KILLED.

January 4, E. S. Dean, citizen, North Star, Mich. Walking on track in advance of passenger train; carelessness of deceased.

January 21, Wm. C. Thomas, citizen, Taymouth, Mich. Lying on track intoxicated; carelessness of deceased.

April 11, G. H. Bortle, citizen, Ann Arbor, Mich. Stealing ride on train; carelessness of deceased.

June 5, Ed. Tray, citizen, Cadillac, Mich. Lying on track intoxicated; carelessness of deceased.

June 28, Mike O'Brien, citizen, Cadillac, Mich. Lying on track intoxicated; carelessness of deceased.

December 18, John Lomis, citizen, Cadillac, Mich. Walking on track intoxicated; carelessness of deceased.

Company exonerated in all above cases.

#### INJURED.

February 14, F. Reinhart, brakeman, Ann Arbor, Mich. Arm mashed; coupling cars.

August 19, F. Dahm, citizen, Azalia, Mich. Struck by passenger train, leg broken; The man is deaf and dumb.

October 18, Ed. Arnold, brakeman, Milan, Mich. Arm mashed; coupling cars.

November 30, C. R. Perrine, brakeman, Corunna, Mich. Leg broken; switching.

#### TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Ca of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....					2	
Derailments.....						
Falling from trains.....						
Frogs.....						
Getting on and off trains.....						
Highway crossings.....						
Miscellaneous.....					1	
Overhead obstructions.....						
Trespassers on trains.....			1			
Trespassers on tracks.....			5			1
Total.....			6		3	1

#### SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	6
Number of persons injured during the year,	4
Number of casualties purely accidental,	
Number resulting from lack of caution, carelessness, or misconduct,	6
Persons killed or injured while intoxicated,	2
Trespassers and tramps killed or injured,	2
Suicides,	

#### CLASSIFICATION OF EMPLOYES.

##### KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....		3	3
Conductors.....			
Engineers.....			
Firemen.....			
Laborers.....			
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....		3	3

STATE OF OHIO, }  
COUNTY OF LUCAS, } ss.

Henry W. Ashley, General Manager, and George B. Parke, Auditor, of the Toledo, Ann Arbor & North Michigan Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

HENRY W. ASHLEY.

G. B. PARKE.

Subscribed and sworn to before me this 21st day of April, A. D. 1890.

ISAAC N. HUNTSBERGER,

*Commissioner for Michigan in Ohio.*

ANNUAL REPORT  
OF THE  
LAKE SHORE & MICHIGAN SOUTHERN RAILWAY  
COMPANY.

*For the Year Ending December 31, 1889.*

[Filed April 29, 1890.]

**OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.**

*President and General Manager, JOHN NEWELL, Cleveland. Ohio.*

**Vice President and Secretary, E. D. WORCESTER, New York, N. Y.**

**Auditor, CYRUS P. LELAND, Cleveland, Ohio.**

**Treasurer, E. D. WORCESTER, New York, N. Y.**

**General Superintendent, PHINEAS P. WRIGHT, Cleveland, Ohio.**

*Assistant General Superintendent, W. H. CANNIFF, Cleveland, Ohio.*

*Division Superintendents, C. B. COUCH, East Division, Cleveland, Ohio.*

**THOS. FLESHER, JR., Toledo Division, Cleveland, Ohio.**

**T. J. CHARLESWORTH**, Mich. Division, Toledo, O.

A. G. AMSDEN, Western Division, Chicago, Ill.

**T. W. NILES, Franklin Division, Youngstown, O.**

**S. S. HAND, Detroit Division, Detroit, Mich.**

**T. F. WHITTELEY, Lansing Division, Hillsdale, Mich.**

**R. C. HARRIS**, Kalamazoo Division, Kalamazoo, Mich.

**Chief Engineer, G. H. KIMBALL, Cleveland, Ohio.**

*Superintendent of Telegraph, WM. KLINE, Toledo, Ohio.*

**Local Treasurer, N. BARTLETT, Cleveland, Ohio.**

*General Passenger Agent, A. J. SMITH, Cleveland, Ohio.*

**General Freight Agent, J. T. R. McKAY, Cleveland, Ohio.**

*Attorney, GEORGE O. GREEN, Cleveland, Ohio.*

## DIRECTORS.

C. VANDERBILT, New York, N. Y.

DARIUS O. MILLS, New York, N. Y.

WILLIAM L. SCOTT, Erie, Pa.

**RASSELAS BROWN, Warren, Pa.**

**Terms expire, May, 1890.**

WM. K. VANDERBILT, New York, N. Y.

SAML. F. BARGER, New York, N. Y.

**CHARLES M. REED, Erie, Pa.**

**JEPHTHA H. WADE, Cleveland, Ohio.**

**Terms expire, May, 1891.**

F. W. VANDERBILT, New York, N. Y.

JOHN E. BURRILL, New York, N. Y.

E. D. WORCESTER, New York, N. Y.

JOHN NEWELL, Cleveland, Ohio.

JOHN DEKOVEN, Chicago, Ill.

Terms expire, May, 1892.

## STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—1846.

Number of stockholders at date of last election, - - - - - 3,264

Number of stockholders in Michigan at same date, - - - - - 29

Amount of full paid stock held in Michigan at same date, - - - - - \$21,100

Date of annual meeting of stockholders,—First Wednesday in May.

Fiscal year of company ends,—December 31.

General offices of the company are located at,—Cleveland, Ohio.

## REMARKS.

Address all communications concerning this report to—

CYRUS P. LELAND, Auditor,  
Cleveland, Ohio.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$19,487,196 74
Total expenses, including taxes, - - - - -	\$12,847,451 57	
Net income, - - - - -		\$6,639,745 17
Interest on funded debt, - - - - -	\$3,245,015 00	
Interest on guaranteed stock, - - - - -	53,350 00	
Interest on six branch roads, - - - - -	507,645 40	
		3,806,010 40
Balance applicable to dividends, - - - - -		\$2,833,734 77
Dividends declared, 5%, - - - - -	\$2,473,325 00	
Balance for the year, - - - - -		\$360,409 77
Balance (profit and loss) last year, - - - - -		10,649,801 67
Items not included in above, as follows:		
Interest and dividends on assets, - - - - -		382,541 49
Balance forward to next year, - - - - -	11,392,752 93	
	\$11,392,752 93	\$11,392,752 93

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, - \$50,000,000 00

Par value of shares, - - \$100 00

No. of shares issued, - - 500,000

Amount paid in on common, - - \$49,466,500 00

Amount paid in on guaranteed, - - 533,500 00

Total amount paid in as per books of the company, - \$50,000,000 00

Paid in per mile of road owned by company,

-864.87 miles, - - - \$57,812 16

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	When Due.	Interest.		Amount.
		Rate.	Payable.	
L. S. & M. S., consolidated 1st mortg., July 1, 1870..	July 1, 1900..	7%	Jan., Apr., July and Oct.....	\$15,190,000
Lake Shore R'y, dividend bonds, April 1, 1899.....	April 1, 1899..	7%	April and Oct.....	1,353,000
O. P. & A., 2d mortgage, October 1, 1897.....	Oct. 1, 1897..	7%	April and Oct.....	920,000
Buffalo & Erie, mortgage, April 1, 1898.....	April 1, 1898..	7%	April and Oct.....	2,784,000
Total amount outstanding of the first general mortgage of \$35,000,000.....				\$20,250,000
L. S. & M. S., consol. 2d general mortg., Dec. 1, 1873..	Dec. 1, 1903..	7%	June and Dec....	24,692,000
Total funded debt L. S. & M. S. R'y Co. proper.....				\$44,942,000
<i>Debt of Proprietary Roads, owned wholly by Lake Shore &amp; Michigan Southern Railway Company:</i>				
D. M. & T., 1st mortg, guaranteed by L. S. & M. S..	Aug. 1, 1903..	7%	Feb. and Aug....	924,000
Kalamazoo & White Pigeon, 1st mortgage.....	Jan. 1, 1940..	5%	Jan. and July....	400,000
Total funded debt of proprietary roads.....				\$1,324,000
Total funded debt.....				\$46,266,000

## UNFUNDED DEBT.

No unfunded debt; cash on hand exceeding current liabilities.

## RECAPITULATION.

Total funded debt, - - - - - \$46,266,000 00

Total debt liabilities, - - - - - \$46,266,000 00

Amount of debt liabilities per mile of road,—1,026.96 miles, 45,051 41

Total amount of stock and debt, - - - \$96,266,000 00

Stock and debt per mile of road, { 864.87 miles, - 57,812 16  
 { 1,026.96 miles, - 45,051 41



## GENERAL BALANCE SHEET.—DR.

Construction account, - - - - -	\$66,700,000 00	
Equipment account, - - - - -	17,300,000 00	
		\$84,000,000 00
Other investments, specifying same:		
Detroit, Monroe & Toledo railroad, - - - - -	\$1,381,600 00	
White Pigeon & Kalamazoo railroad, - - - - -	610,000 00	
Northern Central Michigan railroad, - - - - -	1,357,000 00	
Jamestown & Franklin railroad, - - - - -	2,214,005 31	
Stocks of other companies, - - - - -	14,713,240 05	
		20,275,845 36
Cash items:		
Cash, - - - - -	\$3,734,338 59	
Due from agents, - - - - -	402,201 86	
		4,136,540 45
Other assets:		
Materials and supplies, - - - - -	\$577,435 93	
Debit balances from companies and individuals, - - - - -	276,605 63	
Pacific Hotel Company, Chicago, - - - - -	303,803 37	
General office property and other real estate, - - - - -	351,007 59	
		1,508,852 52
Total, - - - - -		\$109,921,238 33

## GENERAL BALANCE SHEET.—CR.

Capital stock, - - - - -	\$50,000,000 00	
Funded debt, - - - - -	46,266,000 00	
		\$96,266,000 00
Unfunded debt:		
Dividends unpaid, paid Feb. 1, 1890, - - - - -	\$1,510,670 00	
Vouchers and accounts, paid in Jan., 1890, - - - - -	751,815 40	
		2,662,485 40
Profit and loss or income accounts, - - - - -		11,392,752 93
Total, - - - - -		\$109,921,238 33

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment, - - - - -	\$84,000,000 00
Average cost per mile of road, not including sidings, —864.87 miles, - - - - -	90,032 44
Proportion of cost for Michigan, - - - - -	21,047,902 49

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Roads.	Local Fares.	Through Fares.	Total Passenger Fares.	Express and Baggage.	Mails.	Other Sources.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
Main line and branches.....	\$3,455,259 16	\$1,222,999 65	\$4,678,258 81	\$459,697 25	\$1,061,598 89		\$6,219,559 95	\$1,212,810 29		\$6,475 23
<i>Leased or Proprietary Roads:</i>										
Detroit, Monroe & Toledo.....	145,098 06		145,098 06	10,586 22	10,942 89		166,627 17	146,079 38		2,671 72
Detroit, Hillsdale & S. W.....	16,647 73		16,647 73	1,497 90	3,312 92		21,458 55	21,458 55		329 12
Fort Wayne & Jackson.....	85,224 67		85,224 67	4,998 43	7,210 72		97,433 62	44,359 68		986 77
Northern Central Michigan.....	42,949 13		42,949 13	1,621 41	3,288 12		47,863 66	47,863 66		762 85
Kalamazoo & White Pigeon.....	39,111 89		39,111 89	2,515 04	5,005 53		46,632 45	46,632 45		1,275 16
Kalamazoo, Allegan & G. R.....	61,308 74		61,308 74	3,942 05	7,845 63		73,091 43	73,091 43		1,251 14
Detroit & Chicago.....	13,886 38		13,886 38	1,065 09	3,185 98		18,107 45	16,859 21		
Total passenger earnings.....	\$3,859,480 76	\$1,222,999 65	\$5,082,480 41	\$485,983 39	\$1,122,340 63		\$6,690,754 43	\$1,609,154 55	\$1 69.49	\$4,746 73

## FREIGHT EARNINGS.

Roads.	Local Traffic.	Through Traffic.	Total Traffic.	Other Sources.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
Main line and branches.....	\$8,401,769 20	\$3,252,536 80	\$11,654,306 00	\$197,712 38	\$11,842,018 38	\$2,471,191 10		\$19,193 76
<i>Leased or Proprietary Roads:</i>								
Detroit, Monroe & Toledo.....	363,069 15		363,069 15	14,114 67	378,060 82	331,431 02		6,082 39
Northern Central Michigan.....	46,413 96		46,413 96	1,870 99	48,284 95	48,284 95		791 55
Kalamazoo & White Pigeon.....	52,900 41		52,900 41	1,068 12	53,968 53	53,968 53		1,442 12
Kalamazoo, Allegan & Grand Rapids.....	70,780 02		70,780 02	2,905 55	73,685 57	73,685 57		1,270 44
Detroit, Hillsdale & Southwestern.....	16,964 98		16,964 98	22 00	16,986 96	16,986 96		261 34
Fort Wayne & Jackson.....	111,746 43		111,746 43	1,850 69	113,127 12	53,074 19		1,134 36
Detroit & Chicago.....	20,286 69		20,286 69	91	20,297 60	13,886 39		286 49
Total freight earnings.....	\$9,084,207 72	\$3,252,536 80	\$12,336,744 52	\$209,065 21	\$12,545,809 73	\$3,066,910 42	\$1 71.90	\$8,900 58

Total transportation earnings, - - - \$19,236,564 21

Transportation earnings per mile of road, - \$13,647 31

Transportation earnings per train mile, - 1 71

Miscellaneous receipts from operating account,  
other than for transportation, as follows:

From rentals of tracks or terminals, - \$222,151 69

From other sources, - - - 28,480 84

Total, - - - \$250,632 53 \$250,632 53

Distribution of miscellaneous earnings between main line and leased or  
proprietary roads:

COMPANY.	Total Miscellaneous.	Proportion for Michigan.
Detroit, Monroe & Toledo railroad, -	\$17,157 19	\$17,157 19

Total earnings from operation of road, - - - \$19,487,196 74

Total earnings per mile of road, - - - \$13,825 12

Total earnings per train mile, - - - 1 73.3

Proportion of taxable earnings for Michigan, - - - 1,009,220 77

Total taxable earnings per mile of road in

Michigan, - - - 2,631 74

Income other than from earnings:

Interest and dividends on assets, - - - 382,541 49

Total income from all sources, - - - \$19,869,738 23

Proportion of income for Michigan, - - - 4,693,222 16

#### ANALYSIS OF EXPENSES.

##### CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track, - - - \$1,292,187 12

Renewals of rails, - - - 256,723 61

Renewals of ties, - - - 365,297 10

Repairs of bridges, including culverts and cattle guards, - 411,556 27

Repairs of fences, road crossings and signs, - - - 84,188 70

Repairs of buildings, - - - 365,612 90

Total, - - - \$2,775,565 70

##### CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives, - - - \$836,971 97

Repairs of passenger cars, - - - 246,169 72

Repairs of freight cars, - - - 1,390,839 66

Total, - - - \$2,473,981 35

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives,	\$748,380	90
Water supply,	57,248	87
Oil and waste,	72,193	61
Locomotive service,	1,180,782	47
Passenger train service,	226,539	15
Passenger train supplies,	10,017	19
Mileage of passenger cars,	25,465	90
Freight train service,	580,094	42
Freight train supplies,	3,186	01
Mileage of freight cars,	600,897	52
Telegraph expenses (maintenance and operating),	306,665	14
Damage and loss of freight and baggage,	42,036	15
Damages to property and cattle,	31,271	96
Personal injuries,	76,416	30
Agents and station service,	2,178,310	83
Station supplies,	59,918	80
Total,	\$6,199,425	22

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company,	\$113,599	44
Salaries of clerks in general offices,	259,019	63
Law expenses,	66,134	84
Rents payable,	103,109	46
Stationery and printing,	104,276	53
Outside agencies and advertising,	216,080	23
Contingencies,	41,842	56
Taxes,	494,416	61
Total,	\$1,398,479	80

## RECAPITULATION OF EXPENSES.

	Per cent of Expenses.	
Maintenance of way and buildings,	21.60	\$2,775,565 70
Maintenance of motive power and cars,	19.26	2,473,981 35
Conducting transportation,	48.26	6,199,425 22
General expenses, including taxes,	10.88	1,398,479 30
Total operating expenses and taxes,	100.00	\$12,847,451 57
Operating expenses and taxes per mile of road,	\$9,114	57
Operating expenses and taxes per train mile run, for trains earning revenue,—11,245,891 miles,	1	14.2
Proportion of operating expenses and taxes for Michigan:		
Main line,		\$2,428,862 12

*Leased or Proprietary Roads.*

Detroit, Monroe & Toledo railroad, - - -	\$303,369	21
Detroit, Hillsdale & Southwestern railroad, - - -	38,445	41
Fort Wayne & Jackson railroad, - - -	72,715	76
Northern Central Michigan railroad, - - -	73,005	56
Kalamazoo & White Pigeon railroad, - - -	75,923	15
Kalamazoo, Allegan & Grand Rapids railroad, - - -	111,447	77
Detroit & Chicago railroad, - - -	41,846	92
		<hr/>
		\$716,753 78
Total proportion of expenses for Michigan, - - -		\$3,145,615 90
Percentage of expenses to earnings,—65.93 %.		
Net earnings per mile of road, - - -	\$4,710	55
Net earnings per train mile, - - -		59

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

Main line, Monroe, to Indiana State line, October, 1851.  
 Jackson branch, Tecumseh, to Jackson, July 1857.  
 Erie & Kalamazoo, Toledo Ohio, to Adrian, July 1835.  
 Detroit & Chicago, Detroit River Junction, to Fayette Indiana, July 1874.  
 Detroit H. & S. W. Ypsilanti, to Hillsdale, November 1872.  
 Detroit M. & T. Detroit Mich., to Toledo Ohio, July 1857.  
 K., A. & G. R., Kalamazoo, to Grand Rapids, March 1, 1869.  
 K., & W. P. Kalamazoo, to White Pigeon, May 3, 1867.  
 N. C. Mich., Jonesville, to Lansing, January 13, 1873.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from State Line of Ohio and Michigan to State Line of Michigan and Indiana, - - -	115.95	
In New York from Buffalo to State Line of New York and Pennsylvania, - - -	69.50	
In Pennsylvania, from State Line of New York and Pennsylvania to State Line of Pennsylvania and Ohio, - - -	44.06	
In Ohio, from State Line of Pennsylvania and Ohio to State Line of Ohio and Michigan, - - -	195.01	
In Indiana, from State Line of Michigan and Indiana to State Line of Indiana and Illinois, - - -	101.95	
In Illinois, from State Line of Indiana and Illinois to Chicago, - - -	14.02	
	<hr/>	
Total length completed, - - -		540.49
Length of double track on main line, - - -		314.44

## BRANCHES.

Sandusky, from Elyria Junction to Milbury Junction, via Sandusky, - - -	72.95
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	Miles. 100ths.	Miles. 100ths.
Sandusky Pier, from Sandusky Junction to old depot at Sandusky, - - - - -	3.72	
Air Line, from Air Line Junction to Elkhart, - - - - -	130.83	
Jackson, from Lenawee Junction to Jackson, - - - - -	41.98	
Monroe, from Lenawee Junction to Monroe, - - - - -	29.37	
Ashtabula Harbor, from Ashtabula Harbor to crossing of Main Line, - - - - -	2.33	
Dunkirk, Junction with D. A. V. R. R. at Dunkirk, - - - - -	1.50	
Detroit, from Air Line Junction to Detroit, - - - - -	62.36	
Kalamazoo, from White Pigeon to Kalamazoo, - - - - -	36.57	
Lansing, from Jonesville to North Lansing, - - - - -	61.14	
Detroit and Chicago, from Detroit River Junction to Fayette, - - - - -	67.60	
Ashtabula, from Ashtabula to Jamestown, - - - - -	35.98	
Total length of branches owned by company, - - - - -		546.33
Total length of branches owned by company in Michigan, - - - - -	286.67	
Total length of road belonging to this company, - - - - -		1,086.82
Total length of road belonging to this company in Michigan, - - - - -	402.62	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated, - - - - -	94.24	
Aggregate length of tracks in Michigan belonging to this company, computed as single track, - - - - -		496.86
Gauge of track, 4 feet 8½ inches.		

*Proprietary or Leased Roads Operated by this Company.*

Name description, and length of each:	Total Miles. In Michigan.	
Kalamazoo, Allegan & Grand Rapids Railroad from Kalamazoo to Grand Rapids, - - - - -	58.42	58.42
Detroit, Hillsdale & Southwestern Railroad from Ypsilanti to Bankers, - - - - -	65.20	65.20
Ft. Wayne & Jackson Railroad from Ft. Wayne to Jackson, - - - - -	97.83	44.54
Jamestown & Franklin Railroad from Jamestown to Oil City, - - - - -	50.91	
Mahoning Coal Railroad, (including three short branches) from Andover to Youngstown, - - - - -	42.06	
Mahoning Coal Railroad to Sharon Branch, - - - - -	8.31	
Total, - - - - -	322.73	168.16
Total miles operated by the company, - - - - -	1,409.55	570.78

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of	31; aggregate length, feet,	4,225
Stone bridges, number of	2; aggregate length, feet, (30 ft. and upwards),	105
Iron bridges, number of	7; aggregate length, feet,	790
Combination bridges, number of	1; aggregate length, feet,	305
Wooden trestles, number of	85; aggregate length, feet, (60 ft. and upwards),	12,255
Total,	126;	17,680

*Draw Bridges in Michigan.*

How many on your line?	2
Where located, when built, and length of draw span.	
One over Grand River near Grand Rapids.	
One over Rouge River near Detroit.	
One built in 1879; 179 feet.	
One built in 1887; 160 feet.	
Character of structure:	
One wood Howe Truss; one iron Pratt Truss.	
Material of which constructed:	
One wood and one iron.	
Height above water, and depth of water under bridge:	
Height above water, one 22 feet and one 9 feet 16 inches; depth of water, one 7 feet and one 16 feet.	
How swung, by engine or hand power?	
Hand.	
Approaches, straight or curved:	
One straight and one curved.	
Do you require all trains to come to a full stop before crossing a draw, and how are they signalled?	
Yes; target.	

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Chicago & West Michigan Railroad at Grandville.  
 Cincinnati, Jackson & Mackinaw Railroad at Allegan.  
 Cincinnati, Jackson & Mackinaw Railroad at Homer.  
 Cincinnati, Jackson & Mackinaw Railroad at Hanover.  
 Cincinnati, Jackson & Mackinaw Railroad at Tecumseh.  
 Chicago & Grand Trunk Railroad at Schoolcraft.  
 Chicago & Grand Trunk Railroad at Lansing.  
 Canada & St. Louis Railroad at Sturgis.  
 Flint & Pere Marquette Railroad at Carleton.  
 Grand Rapids & Indiana Railroad at Grand Rapids.  
 Grand Rapids & Indiana Railroad at Plainwell.  
 Grand Rapids & Indiana Railroad at Kalamazoo.  
 Grand Rapids & Indiana Railroad at Sturgis.  
 Michigan Central Railroad at Three Rivers.  
 Michigan Central Railroad at Homer.  
 Michigan Central Railroad at Albion.

Michigan Central Railroad at Eaton Rapids.  
 Michigan Central Railroad at Lansing.  
 Michigan Central Railroad at Jackson & Ft. Wayne Branch.  
 Michigan Central Railroad at Detroit, Woodward Ave.  
 Michigan Central Railroad at West Detroit.  
 Michigan Central Railroad at Kalamazoo.  
 Michigan Central Railroad at Jackson, Jackson Branch.  
 Toledo, Ann Arbor & North Michigan Railroad at Federman.  
 Toledo, Ann Arbor & North Michigan Railroad at Pittsfield Junction.  
 Toledo, Ann Arbor & North Michigan Railroad at Alexis.  
 Toledo, Ann Arbor & North Michigan Railroad at Dundee.  
 Wabash Railroad at Adrian.  
 Wabash Railroad at Raisin Centre.  
 Wabash Railroad between West Detroit & Ecorces.

What railroads cross your road at grade in this State, and at what locality?  
 Under,—

Cincinnati, Jackson & Mackinaw Railroad at Hudson and Jerome.

At what crossings are interlocking and derailing switches in operation?  
 Albion and Lansing.

What pattern or patterns have you adopted?

The above are Union Switch and Signal Company machines and put in by Michigan Central Railroad, being joint crossings.

Number of crossings of highways at grade in this State, 827

Number of crossings of highways at grade in this State at which there are gates or flagmen, 37

Number of crossings of highways over or under railroad, Over,—7, under,—5, 12

Number of highway bridges 18 feet above track, 7

Number of highway bridges less than 18 feet above track, None.

Have safety guards been erected at over-head obstructions, Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883, Yes.

How are they treated? Blocked with wood or cinders.

#### Stations.

Number of stations on whole line, 288

Same in Michigan, 87

#### Employés.

Number persons regularly employed on all roads operated by company, including officials, 11,974

Same in Michigan, 1,879

Classify your employés as per following list:

	Number.
Baggagemen,	160
Brakemen,	665
Conductors,	320
Engineers,	356
Firemen,	583
Laborers,	1,477
Shopmen,	1,020
Yardmen,	1,018
Others,	6,375



## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - 1,141.56

Give the number of miles required to complete fence both  
sides of your track, in Michigan, and the counties in  
which needed, - - - - - None.

*Road Bed and Track.*

Number of track sections in Michigan, - - - - 100  
Average length of sections—miles, - - - - 5.67  
Average number of men in each section gang, - - - - 4  
Number of new ties put in whole line during the year, - 711,678  
Number of new ties put in track in Michigan, - - - 166,986  
Average number of new ties per mile of road, whole line, - 505

New rails put in track:

Steel (15,350 tons), 148.91 miles.

Total miles of track laid with new rails, - - - - 148.91

*Bridges and Culverts in Michigan.*

Amount of trestle work replaced with earth during year,  
—linear feet, - - - - 51.50

Timber culverts replaced during the year, - - - - 51

With timber,—number, - - - - 51  
New bridges built during the year,—number - - - - 1

At Monroe, Pratt truss, iron, built in September, length 360 feet.

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - -	498	
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - -	34	
Total, - - - -	532	\$1,869,900 00

Number of passenger cars—12 wheel, including  
official cars, - - - - 24

Number of passenger cars—8 wheel, including  
official cars, - - - - 184

Number of express and baggage cars, - - - - 97

Number of box freight cars, - - - - 11,908

Number of stock cars, - - - - 1,467

Number of platform cars, - - - - 1,509

Number of ore and coal cars, - - - - 3,822

Number of conductors' way cars, - - - - 259

Other cars as follows:

Working cars, - - - - 224 5,400,446 00

Total, - - - - 19,494 \$7,270,346 00

Number of locomotives equipped with power brakes, 511  
 Number of passenger-train cars equipped with power brakes, All.  
 Number of freight cars equipped with power brakes, None.  
 What patterns of power brakes have you in use? Westinghouse and Steam Driver brake.  
 Are your freight cars being equipped with automatic couplers as required by Act. No. 147, Session Laws of 1885? Yes.  
 What pattern or patterns have you adopted for use? Ames & Janney.  
 How are your passenger cars heated? Baker heaters and also the Martin system of steam heating from the engine.

### MILEAGE, TRAFFIC, ETC.

#### Train Mileage.

Miles run by passenger trains during the year,	-	-	3,947,496
Miles run by freight trains during the year,	-	-	7,298,395
Total mileage of trains earning revenue,	-	-	11,245,891

#### Passenger Traffic.

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried,	104,474		
Number of local passengers carried,	4,309,118		
Total number of passengers carried,	4,413,592		

Total passenger mileage, or passengers carried one mile, 222,555,555  
 Average distance traveled by each passenger, 50.50

Average amount received from each passenger,	-	-	\$1 15.000
Average rate of fare per mile for through passengers,	-	-	02.168
Average rate of fare per mile for local passengers,	-	-	02.323
Average rate of fare per mile for all passengers,	-	-	02.284

#### Freight Traffic.

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	1,237,110		
Number of tons of local freight carried,	8,783,489		

Total tons of freight carried, 10,020,599

Total mileage of through freight,	-	-	541,456,268
Total mileage of local freight,	-	-	317,553,554

Total freight mileage, or tons carried one mile, 1,859,009,822

Average ton haul for through freight,	-	-	437.7
Average ton haul for local freight,	-	-	150
Average ton haul for all freight,	-	-	185.5

Average amount received for each ton haul,	\$1 23.11
Average rate per ton per mile received for through freight,	00.601
Average rate per ton per mile, received for local freight,	00.689
Average rate per ton per mile, received for all freight,	00.664

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	69,904
Flour,	110,627
Provisions (beef, pork, lard, etc.),	13,418
Animals,	26,412
Other agricultural products,	74,764
Lumber and forest products,	365,804
Coal,	6,204
Plaster, lime and cement,	27,493
Salt,	19,423
Petroleum,	4,865
Pig and bloom iron,	13,702
Other iron and castings,	30,022
Stone, brick and sand,	55,331
Manufactures,	74,884
Merchandise and other articles not enumerated above,	100,747
<b>Total forwarded,</b>	<b>993,600</b>

*Tonnage of Articles Transported—Entire Road.*

	Tons.	Per Cent.
Grain,	917,589	9.16
Flour,	420,507	4.20
Provisions (beef, pork, lard, etc.),	349,514	3.49
Animals,	455,138	4.54
Other agricultural products,	350,631	3.50
Lumber and forest products,	820,222	8.19
Coal,	1,408,288	14.05
Plaster, lime and cement,	142,206	1.42
Salt,	46,531	.46
Petroleum,	486,302	4.85
Railroad iron, iron and steel rails,	26,857	.27
Pig and bloom iron,	190,139	1.90
Other iron and castings,	574,423	5.73
Ores,	984,474	9.82
Stone, brick and sand,	952,040	9.50
Manufactures,	361,424	3.61
Merchandise and other articles not enumerated above,	1,534,314	15.31
<b>Total tons carried,</b>	<b>10,020,599</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do

you take their freights at the depot, or at the office of such express companies?

American Express Company, Buffalo to Cleveland, pays thirty cents per 100 pounds for through, and 15 to 50 cents per 100 pounds for way freight. United States Express Company, Buffalo to Chicago, pays from 20 to 85 cents per 100 pounds on freight.

These companies do a general express business and deliver freight to us at our depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Total miles of wire, entire road 12,412.

Western Union Telegraph Company, own in Michigan 1,868 miles.

Lake Shore & Michigan Southern Railway, own in Michigan 415 miles.

*Transportation Companies.*

SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Wagner Palace Car Company, New York City.

REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

KILLED.

February 4, Cornelius Schnell, employé of Peninsular Car Works, Detroit. Caught between cars; lack of caution.

February 7, Fred Fragner, brakeman, Warner. Coupling cars; carelessness.

March 5, Robert Gulliver, not employé, occupation not known, Burr Oak. Run over by train; intoxicated and asleep on track.

March 5, Jas. Spurgeon, freight conductor, Jonesville. Coupling; hand hurt and lock-jaw resulted, from which he died.

March 22, Frank Micheclok, not employé, laborer, Wyandotte. Crossing collision (highway).

April 9, Emil Lumke, not employé, not known, Detroit. Walking on track; trespasser.

May 24, Unknown man, tramp, Bronson. Run over by train; trespasser.

May 25, Conrad Buehrer, section laborer, between Adrian and Lenawee junction. Fell from train; carelessness.

June 13, Edward Mc Guickers, not an employé, Kalamazoo. Walking on track; trespasser.

July 3, Wm. Anderson, not an employé, Detroit. Run over by cars; trespasser.

July 6, Leonard Diber, not an employé, Adrian. Asleep on track; trespasser, struck by locomotive.

July 25, Jacob F. Haag, brakeman, Deerfield. Fell from train.

October 3, August Beckman, farm laborer, Quincy. Highway collision; lack of caution.

October 25, Amos Hamley, farm laborer, near Ray. Walking on track; intoxicated trespasser.

October 29, Melvin Percy, section laborer, near Condit. Struck by train; lack of caution.

November 7, C. H. Vandel, brakeman, Detroit. Struck by overhead bridge.

November 26, Wm. Murray, not an employé, Detroit. Highway collision; carelessness.

November 26, Jas. Adams, not an employé, Holland. Walking on track, struck by train; trespasser.

December 3, Wm. Erb, carpenter, Lansing. Fell from ladder; purely accidental.

December 19, David Mosier, driver of bakers wagon, Detroit. Highway collision; carelessness.

#### INJURED.

January 14, Geo. D. Cleveland, lumber dealer, Homer. Fell under train, left leg off; Passenger.

April 10, Geo. Lamb, brakeman, Jonesville. Coupling; left leg off.

April 3, Carl E. Southwell, switchman, Eagle Mills. Coupling; left second finger gone.

April 26, J. F. Haag, brakeman, Monroe. Foot caught in frog; left big toe amputated.

May 22, John George, merchant, Hudson. Walking on track, struck by train; left leg broken, head hurt.

July 17, John A. Washburn, laborer, Jonesville. Hand car derailed; skull fractured.

August 1, Samuel Halley, 7 years old, Monroe. Stealing ride; fell off train, both legs off.

August 4, D. H. Navarre, brakeman, Monroe. Coupling; right second finger off.

August 9, Layman Gage, 6 years old, Detroit. Playing on track jumping on and off cars; left leg off.

August 10, A. P. Tierson, section laborer, Woodstock. Struck by car; breast bone injured, one rib broken and one fractured.

August 20, John P. Lindsley, not employé, Hopkins. Highway collision; contusion of left shoulder and face.

August 20, Mrs. A. Button, not an employé, Hopkins. Highway collision; leg broken.

September 12, Elias Kistler, passenger, White Pigeon. Jumped off moving train; two limbs fractured and internal injuries.

October 12, John Sacker, brakeman, Hillsdale. Coupling; first and second left fingers off.

November 1, Geo. Solean, brakeman Detroit. Coupling; end of right fourth finger off.

November 6, John Elliott, brakeman, Quincy. Coupling; left first finger off.

November 7, Adelbert Hazen, yard master, White Pigeon. Coupling; left thumb off.

November 22, Ben. Hagen, brakeman, Tecumseh. Was assisting in unloading a large safe; it fell on his left leg, breaking it and crushing his foot.

November 28, E. F. Morley, conductor, Trenton. Coupling; left fourth finger off.

December 5, Geo. W. Craig, brakeman, Jonesville. Coupling; end of left first finger off.

December 7, Frank Sanborn, laborer, Hillsdale gravel pit. Coupling; fingers mashed and arm bone broken.

December 23, Patrick Braden, brakeman, West Detroit. Coupling; all of right fingers fractured.

December 24, D. W. Whistler, brakeman, Jonesville. Coupling; fingers crushed.

#### TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....		2			12	
Derailments.....					1	
Falling from trains.....		2		1		
Frogs.....					1	
Getting on and off trains.....				1		
Highway crossings.....			4			2
Miscellaneous.....		2	1		2	
Overhead obstructions.....		1				
Trespassers on trains.....						1
Trespassers on track.....			8			2
Total.....		7	13	2	16	5

#### SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year, - - - -	20
Number of persons injured during the year, - - - -	23
Number of casualties purely accidental, - - - -	4
Number resulting from lack of caution, carelessness, or misconduct, - - - -	28
Persons killed or injured while intoxicated, - - - -	2
Trespassers and tramps killed or injured, - - - -	9
Suicides, - - - -	-

## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....	3	10	13
Conductors.....	1	1	2
Engineers.....			
Firemen.....			
Laborers.....	2	3	5
Shopmen.....			
Yardmen.....		2	2
Not classified above.....	1		1
Total.....	7	16	23

STATE OF OHIO, }  
COUNTY OF CUYAHOGA, } ss.

John Newell, President, and C. P. Leland, Auditor, of the Lake Shore and Michigan Southern Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed,

JOHN NEWELL.  
C. P. LELAND.

Subscribed and sworn to before me this 24th day of April, A. D. 1890.

L. Rood Loomis, *Notary Public*.

ANNUAL REPORT  
OF THE  
DETROIT & CHICAGO RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 29, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JOHN NEWELL, Cleveland, Ohio.

*Secretary and Treasurer*, CYRUS P. LELAND, Cleveland, Ohio.

DIRECTORS.

JOHN NEWELL, Cleveland, Ohio.

CORNELIUS VANDERBILT, New York City.

W. K. VANDERBILT, New York City.

ASHLEY POND, Detroit, Mich.

CHAS. F. COX, New York City.

EDWIN D. WORCESTER, New York City.

SAML. F. BARGER, New York City.

CYRUS P. LELAND, Cleveland, Ohio.

DWIGHT W. PARDEE, New York City.

Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—November 19, 1888.

Number of stockholders at date of last election,	11
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Number of stockholders in Michigan at same date,	1
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Amount of full paid stock held in Michigan at same date,	\$1,000 00
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Date of annual meeting of stockholders,—Second Wednesday in November.

Fiscal year of company ends,—December 31.

General offices of the company are located at Cleveland, Ohio.

REMARKS.

Entire capital stock owned by the Lake Shore & Michigan Southern Railway Company.



## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$1,000,000 00
Par value of shares, - - - \$100 00	
Average price received per share, 100 00	
No. of shares issued, - - - 10,000	
Amount paid in on common, - - - - \$1,000,000 00	
Total amount paid in, as per books of the company, -	1,000,000 00
Paid in per mile of road owned by company,	
—67.60 miles, - - - - -	\$14,792 90

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt, - - - - -	None.
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## UNFUNDED DEBT.

Unfunded debt, - - - - -	None.
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## RECAPITULATION.

Total amount of stock and debt, - - - - -	\$1,000,000 00
Stock and debt per mile of road, - - - - -	14,762 90

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction, - - - - -	\$5,176,557 58
Average cost per mile of road not including sidings,	
—67.60 miles, - - - - -	76,576 29
Proportion of cost of construction for Michigan, - - -	4,818,712 07

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
1874.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan, - - -	62.94	
Length completed in Ohio, - - -	4.66	
Total length completed, - - -		67.60
Total length of road belonging to this company, - - -	67.60	
Total length of road belonging to this company in Michigan, - - -		62.94

	Miles. 100ths.	Miles. 100ths.
Aggregate length of sidings, spurs, and other tracks not above enumerated, - - - - -	4.32	
Same in Michigan, - - - - -		4.00
Aggregate length of tracks belonging to this com- pany, computed as a single track, - - - - -	71.92	
Same in Michigan, - - - - -		66.94
Gauge of track, 4 feet, 8½ inches.		

STATE OF OHIO, }  
COUNTY OF CUYAHOGA, } ss.

John Newell, President, and Cyrus P. Leland, Secretary, of the Detroit & Chicago Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[S. L. OF R. R.]

Signed,

JOHN NEWELL.

CYRUS P. LELAND.

Subscribed and sworn to before me this 24th day of April, A. D. 1890.

L. ROOD LOOMIS, *Notary Public.*

ANNUAL REPORT  
OF THE  
DETROIT, HILLSDALE & SOUTHWESTERN RAILROAD  
COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 29, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, ELIJAH SMITH, Boston, Mass.  
*Secretary and Treasurer*, P. W. SMITH, Boston, Mass.  
*Transfer Agent*, FARMERS LOAN & TRUST CO., New York City.

DIRECTORS.

ELIJAH SMITH, New York, N. Y.  
JAMES P. COOK, Salem, Mass.  
CALEB W. LORING, Boston, Mass.  
EDWARD L. GIDDINGS, Boston, Mass.  
P. W. SMITH, Boston, Mass.  
J. W. POTTER, Boston, Mass.  
CHARLES E. GUILD, Boston, Mass.  
M. V. B. EDGERLY, Springfield, Mass.  
GEORGE B. WARREN, Troy, N. Y.

Terms expire January 13, 1891.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—January 30, 1875.  
Number of stockholders at date of last election,      338  
Number of stockholders in Michigan at same date,      2  
Amount of full paid stock held in Michigan at same date,      \$1,700 00  
Date of annual meeting of stockholders,—Second Tuesday in January.  
Fiscal year of company ends,—January 1.  
General offices of the company are located at Ypsilanti, Michigan.

REMARKS.

The property of the Detroit, Hillsdale & Southwestern Railroad Company is leased in perpetuity to the Lake Shore & Michigan Southern Railway Company, lease dated September 5, 1881. The terms are 3 per cent per annum until July 1, 1883, and 4 per cent per annum thereafter.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$1,350,000 00
Par value shares,	\$100 00
Average price received per share,	100 00
Number of shares issued,	13,500
Amount paid in on common,	\$1,350,000 00
Total amount paid in as per books of the company,	1,350,000 00
Paid in per mile of road owned by company, miles,—65.20	\$20,705 52

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt,	None.
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## UNFUNDED DEBT.

Unfunded debt,	None.
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## RECAPITULATION.

Total amount of stock and debt,	\$1,350,000 00
Stock and debt per mile of road,	20,705 52

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction,	\$1,288,648 59
Average cost of construction per mile of road, not including sidings,—65.20 miles,	19,764 55
Proportion of cost of construction for Michigan,	1,288,648 59
Total expended for equipment,	53,511 74
Average cost per mile,	820 73
All in Michigan,	820 73

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

November, 1872.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan,	65.20	
Total length completed,		65.20
Total length of road belonging to this company,	65.20	
Total length of road belonging to this company in Michigan,		65.20

	Miles. 100ths.	Miles. 100ths.
Aggregate length in Michigan, of sidings, spurs, and other tracks not above enumerated, - - -	4.29	
Same in Michigan, - - - - -		4.29
Aggregate length of tracks in Michigan belong- ing to this company, computed as single track,	69.49	
Same in Michigan, - - - - -		69.49

Gauge of track, 4 feet 8½ inches.

STATE OF NEW YORK }  
COUNTY OF NEW YORK, } ss.

Elijah Smith, President, P. W. Smith, Secretary, of the Detroit, Hillsdale & Southwestern Railroad company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

ELIJAH SMITH.  
P. W. SMITH.

Subscribed and sworn to before me this 18th day of April, A. D. 1890.

L. R. KIDDER, *Notary Public.*

ANNUAL REPORT  
OF THE  
DETROIT, MONROE & TOLEDO RAILROAD COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed April 29, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JOHN NEWELL, Cleveland, Ohio.  
*Secretary and Treasurer*, C. P. LELAND, Cleveland, Ohio.

DIRECTORS.

C. VANDERBILT, New York City.  
W. K. VANDERBILT, New York City.  
JOHN NEWELL, Cleveland, Ohio.  
E. D. WORCESTER, New York City.  
G. H. WORCESTER, New York City.  
ASHLEY POND, Detroit, Mich.  
GEO. C. GREEN, Cleveland, Ohio.  
P. P. WRIGHT, Cleveland, Ohio.  
ADDISON HILLS, Cleveland, Ohio.  
C. P. LELAND, Cleveland, Ohio.

Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

Number of stockholders at date of last election,	- - - - -	2
Number of stockholders in Michigan at same date,	- - - - -	1
Amount of full paid stock held in Michigan at same date,	- - - - -	\$100 00
Date of annual meeting of stockholders,—Fourth Tuesday in April.		
Fiscal year of company ends,—December 31.		
General offices of the company are located at Cleveland, Ohio.		

REMARKS.

Entire capital stock, except one share owned by Lake Shore & Michigan Southern Railway Company.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$414,100 00
Par value of shares, - - - \$100 00	
No. of shares issued, - - - 4,141	
Amount paid in on common, - - - \$414,100 00	
Total amount paid in as per books of company, - - -	414,100 00
Paid in per mile of road owned by company,—	
62.36 miles, - - - - -	\$6,640 47

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage.....	7%	1906.....	.....	\$924,000 00
Total funded debt.....				\$924,000 00

## UNFUNDED DEBT.

Unfunded debt, - - - - -	None.
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## RECAPITULATION.

Total funded debt, - - - - -	\$924,000 00
Total debt liabilities, - - - - -	\$924,000 00
Amount of debt liabilities per mile of road,—62.36 miles, -	14,832 22
Total amount of stock and debt, - - - - -	1,338,100 00
Stock and debt per mile of road, - - - - -	21,472 69

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year, - - -	\$64,680 00
Was it paid for the last year? Yes.	

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company*

Total expended for construction, - - - - -	\$1,381,600 00
Average cost of construction per mile of road, not including	
sidings,—62.36 miles, - - - - -	22,155 22
Proportion of cost of construction for Michigan, - - -	1,196,381 88

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
July, 1857.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan, - - -	54.67	
Length completed in Indiana, - - -	7.69	
	<hr/>	
Total length completed, - - -		62.36
	<hr/>	
Length of double track on main line, in Ohio, -	2.45	
	<hr/>	
Total length of road belonging to this company,	62.36	
Total length of road belonging to this company, in Michigan, - - -		54.67
Aggregate length of sidings, spurs, and other tracks not above enumerated, - - -	22.03	
Same in Michigan, - - -		18.26
	<hr/>	
Aggregate length of tracks belonging to this company, computed as single track, - - -	86.84	
	<hr/>	
Same in Michigan, - - -		72.93
	<hr/>	
Gauge of track, 4 feet 8½ inches.		

STATE OF OHIO, }  
COUNTY OF CUYAHOGA, } ss.

John Newell, President, and C. P. Leland, Secretary, of the Detroit, Monroe & Toledo Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

JOHN NEWELL.  
C. P. LELAND.

Subscribed and sworn to before me this 24th day of April, A. D. 1890,  
L. ROOD LOOMIS, *Notary Public.*



ANNUAL REPORT  
OF THE  
FORT WAYNE & JACKSON RAILROAD COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed May 13, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, SAMUEL SLOAN, New York.  
*Secretary and Treasurer*, ROSEWELL G. ROLSTON, New York.  
*Transfer Agent*, THE FARMERS' LOAN & TRUST CO., New York.

DIRECTORS.

SAMUEL SLOAN, New York, N. Y.  
ROSEWELL G. ROLSTON, New York, N. Y.  
LAWRENCE TURNURE, New York, N. Y.  
WHITTLESEY D. SEARLS, New York, N. Y.  
AMOS ROOT, Jackson, Mich.  
PERCY R. PYNE, New York, N. Y.  
STEPHEN S. PALMER, New York, N. Y.  
HENRY BESTE, New York, N. Y.  
WILLIAM S. SLOAN, New York, N. Y.  
DWIGHT MERRIMAN, Jackson, Mich.  
JAMES F. JOY, Detroit, Mich.

Terms expire February. 1890.

STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

When chartered or articles of association filed,—December 31, 1879.

Number of stockholders at date of last election,	- - - - -	310
Number of stockholders in Michigan at same date,	- - - - -	9
Amount of full paid stock held in Michigan at same date,	- - - - -	\$136,300

Date of annual meeting of stockholders,—January each year.

Fiscal year of company ends December 31.

General offices of the company are located at Jackson Michigan and Grand Central Depot, New York City.

REMARKS.

Leased to Lake Shore & Michigan Southern Railway Company, dated August 24, 1882, in perpetuity, rental \$126,027.88 per annum.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$2,727,554 80
Par value of shares, - - - \$100 00	
No. of shares issued, - - - 27,245	
Amount paid in on common, - - - \$2,291,421 52	
Amount paid in on preferred, - - - 436,133 28	
Total amount paid in, as per books of the company, -	2,727,554 80
Paid in per mile of road owned by company,—97.83 miles, - - -	\$27,880 55

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt, - - - - -	None.
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## UNFUNDED DEBT.

Unfunded debt, - - - - -	None
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## RECAPITULATION.

Total amount of stock and debt, - - -	\$2,727,554 80
Stock and debt per mile of road,—97.83 miles, - - -	27,880 85

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction, - - -	\$2,719,579 53
Average cost of construction per mile of road, not includ- ing sidings,—97.83 miles, - - -	27,799 03
Proportion of cost of construction for Michigan, - - -	1,238,168 79

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
Jackson, Michigan, to Fort Wayne, Indiana, December 15, 1870.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan, - - -	44.54	
Length completed in Indiana, - - -	53.29	
Total length completed, - - -		97.83
Total length of road belonging to this company, - - -	97.83	
Total length of road belonging to this company in Michigan, - - -		44.54

	Miles. 100ths.	Miles. 100ths.
Aggregate length of sidings, spurs, and other tracks not above enumerated, - - -	19.28	
Same in Michigan, - - -		5.29
Aggregate length of tracks belonging to this company, computed as single track, - -	117.11	
Same in Michigan, - - -		49.83

Gauge of track, 4 feet 8½ inches.

STATE OF NEW YORK, }  
COUNTY OF NEW YORK, } ss.

Samuel Sloan, President, and Rosewell G. Rolston, Secretary, of the Ft. Wayne & Jackson Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed,

SAML. SLOAN.  
R. G. ROLSTON.

Subscribed and sworn to before me this 6th day of May, A. D. 1890.

LUDWIG R. MILLER, *Notary Public.*

-                    ANNUAL REPORT

OF THE

KALAMAZOO, ALLEGAN & GRAND RAPIDS RAILROAD  
COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 29, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, J. H. WADE, Cleveland, Ohio.  
*Secretary*, C. P. LELAND, Cleveland, Ohio.  
*Treasurer*, W. S. JONES, Cleveland, Ohio.

DIRECTORS.

O. M. BARNES, Lansing, Mich.  
H. B. PAYNE, Cleveland, Ohio.  
J. H. WADE, Cleveland, Ohio.  
C. P. LELAND, Cleveland, Ohio.  
JOHN NEWELL, Cleveland, Ohio.  
GEO. F. ELY, Cleveland, Ohio.  
J. M. JONES, Cleveland, Ohio.  
J. H. WADE, JR., Cleveland, Ohio.  
W. S. JONES, Cleveland, Ohio.

Terms expire first Wednesday in May.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

Number of stockholders at date of last election,	- - - - -	92
Number of stockholders in Michigan at same date,	- - - - -	14
Amount of full paid stock held in Michigan at same date,	- - - - -	\$206,600
Date of annual meeting of stockholders,—First Wednesday in May.		
Fiscal year of company ends, December 31.		
General offices of this company are located at Cleveland, Ohio.		

REMARKS.

This property is controlled and operated by the Lake Shore & Michigan Southern Railway Company.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,		\$610,000 00
Par value of shares,	\$100	
Average price received per share,	100	
No. of shares issued,	6,100	
Amount paid in on common,	\$610,000 00	
Total amount paid in, as per books of the company,		\$610,000 00
Paid in per mile of road owned by company,		
—58.42 miles,	\$10,441 00	

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage.....	5%	July 1, 1988.....		\$840,000 00
Total funded debt.....				\$840,000 00

## UNFUNDED DEBT.

Unfunded Debt, - - - - - None.

## RECAPITULATION.

Total funded debt,	\$840,000 00
Total debt liabilities,	\$840,000 00
Amount of debt liabilities per mile of road,—58.42 miles,	14,378 00
Total amount of stock and debt,	\$1,450,000 00
Stock and debt per mile of road,—58.42 miles,	24,820 00

## INTEREST ON THE FUNDED DEBT.

What is the amount due each year, - - - - - \$42,000 00  
 Was it paid for the last year? Yes.

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction,	\$1,450,000 00
Average cost per mile of road, not including sidings,	
58.42 miles,	24,820 00
Proportion of cost of construction for Michigan,	1,450,000 00

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

March 1, 1869.

MAIN LINE.		Miles. 100ths.	Miles. 100ths.
Length completed in Michigan,	- - - -	58.42	
Total length completed,	- - - -		58.42
Total length of road belonging to this company,	- - - -	58.42	
Total length of road belonging to this company in Michigan,	- - - -		58.42
Aggregate length of sidings, spurs, and other tracks not above enumerated,	- - - -	10.36	
Same in Michigan,	- - - -		10.36
Aggregate length of tracks belonging this company, computed as single track,	- - - -	68.78	
Same in Michigan,	- - - -		68.78
Gauge of track, 4 feet 8½ inches.			

STATE OF OHIO, }  
COUNTY OF CUYAHOGA, } ss.

J. H. Wade, President, and C. P. Leland, Secretary, of the Kalamazoo, Allegan & Grand Rapids Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

J. H. WADE.

C. P. LELAND.

Subscribed and sworn to before me this 25th day of April. A. D. 1890.

L. ROOD LOOMIS, *Notary Public.*

ANNUAL REPORT  
OF THE  
KALAMAZOO & WHITE PIGEON RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 29, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JOHN NEWELL, Cleveland, Ohio.

*Secretary and Treasurer*, C. P. LELAND, Cleveland, Ohio.

DIRECTORS.

JOHN NEWELL, Cleveland, Ohio.

J. H. WADE, Cleveland, Ohio.

C. P. LELAND, Cleveland, Ohio.

D. P. CLAY, Grand Rapids, Mich.

D. B. MERRILL, Kalamazoo, Mich.

J. W. OSBORN, Kalamazoo, Mich.

M. E. WATTLES, Kalamazoo, Mich.

Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

Number of stockholders in Michigan at same date,—One,—L. S. & M. S. R'y Co.

Fiscal year of company ends December 31.

General offices of the company are located at Cleveland, Ohio.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$230,900 00
Par value of shares,	\$100 00
Average price received per share,	.100 00
No. of shares issued,	2,309
Amount paid in on common,	\$230,900 00
Total amount paid in as per books of the company,	\$230,900 00

Paid in per mile of road owned by company  
 —36.57 miles, \$6,295 00

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage.....	5%	July 1, 1940.....	.....	\$400,000
Total funded debt.....				\$400,000

## UNFUNDED DEBT.

Unfunded debt, None.

## RECAPITULATION.

Total funded debt,	\$400,000 00
Total debt liabilities,	\$400,000 00
Amount of debt liabilities per mile of road,—36.57 miles,	10,937 92
Total amount of stock and debt,	\$630,900 00
Stock and debt per mile of road,—36.57 miles,	17,251 84

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year? \$20,000 00  
 Was it paid for the last year? Yes.

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction,	\$610,000 00
Average cost of construction per mile of road, not including sidings,—36.57 miles,	16,680 00
Proportion of cost of construction for Michigan,	610,000 00

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
 May 3, 1867.



## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan, - - -	36.57	
Total length completed, - - -		36.57
Total length of road belonging to this company, - - -	36.57	
Total length of road belonging to this company in Michigan, - - -		36.57
Aggregate length of sidings, spurs and other tracks not above enumerated, - - -	5.84	
Same in Michigan, - - -		5.84
Aggregate length of tracks belonging to this company, computed as single track, - - -	42.41	
Same in Michigan, - - -		42.41

Gauge of track, 4 feet, 8½ inches.

STATE OF OHIO, }  
COUNTY OF CUYAHOGA, } ss.

John Newell, President, and C. P. Leland, Secretary, of the Kalamazoo & White Pigeon Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

JOHN NEWELL.  
C. P. LELAND.

Subscribed and sworn to before me this 24th day of April, A. D. 1890.

L. ROOD LOOMIS, *Notary Public.*

ANNUAL REPORT  
OF THE  
NORTHERN CENTRAL MICHIGAN RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 29, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JOHN NEWELL, Cleveland, Ohio.

*Secretary, Treasurer and Transfer Agent*, C. P. LELAND, Cleveland, Ohio.

DIRECTORS.

W. K. VANDERBILT, New York City.

W. H. BROCKWAY, Albion, Mich.

JOHN NEWELL, Cleveland, Ohio.

C. T. MITCHELL, Hillsdale, Mich.

S. N. IRWIN, Lansing, Mich.

W. H. CANNIFF, Cleveland, Ohio.

P. P. WRIGHT, Cleveland, Ohio.

A. E. BILLINGS, Hillsdale, Mich.

R. A. MONTGOMERY, Lansing, Mich.

Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

Number of stockholders at date of last election. One, L. S. & M. S. R'y. Co.

Fiscal year of company ends,—December 31.

General offices of the company are located at Cleveland, Ohio.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$610,000 00
No. of shares issued, 6,100	
All owned by L. S. & M. S. R'y Co.	
Total amount paid in, as per books of the company,	610,000 00
Paid in per mile of road owned by company,—miles, 61.14,	\$9,977 12

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

First mortgage bonds, 8%, due 1903. All owned by L. S. & M. S. R'y Co.

## UNFUNDED DEBT.

Unfunded debt, - - - - - None.

## RECAPITULATION.

Total funded debt, - - - - -	\$1,525,000 00
Total debt liabilities, - - - - -	\$1,525,000 00
Amount of debt liabilities per mile of road,—61.14 miles,	24,942 75
Total amount of stock and debt, - - - - -	\$2,135,000 00
Stock and debt per mile of road, - - - - -	34,919 79.

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year? - - - \$122,000 00  
 Was it paid for the last year? Yes.

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction, - - - - -	\$1,357,000 00
Average cost per mile of road, not including sidings,—	
61.14 miles, - - - - -	22,195 00
Proportion of cost of construction for Michigan, - - -	1,357,000 00

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
 January 13, 1873.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan, - - - - -	61.14	
Total length completed, - - - - -		61.14
Total length of road belonging to this company, - - -	61.14	
Total length of road belonging to this company in Michigan, - - - - -		61.14
Aggregate length of sidings, spurs and other tracks not above enumerated, - - - - -	8.00	
Same in Michigan, - - - - -		8.00
Aggregate length of tracks belonging to this company, computed as single track, - - - - -	69.14	
Same in Michigan, - - - - -		69.14

Gauge of track, 4 feet, 8½ inches.

STATE OF OHIO, }  
COUNTY OF CUYAHOGA, } ss.

John Newell, President, and C. P. Leland, Secretary, of the Northern Central Michigan Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

JOHN NEWELL.  
C. P. LELAND.

Subscribed and sworn to before me this 24th day of April, A. D. 1890.

L. ROOD LOOMIS, *Notary Public*.

ANNUAL REPORT  
OF THE  
FLINT & PERE MARQUETTE RAILROAD COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed May 8, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, W. W. CRAPO, New Bedford, Mass.  
*Vice President and General Manager*, H. C. POTTER, East Saginaw, Mich.  
*Secretary and Treasurer*, H. C. POTTER, JR., East Saginaw, Mich.  
*Auditor*, GILBERT W. LEDLIE, East Saginaw, Mich.  
*Asst. General Manager*, DAVID EDWARDS, East Saginaw, Mich.  
*Superintendent*, S. KEELER, East Saginaw, Mich.  
*Asst. Superintendent*, W. F. POTTER, East Saginaw, Mich.  
*Division Superintendent*, S. T. CRAPO, Port Huron, Mich.  
*Chief Engineer*, WM. B. SEARS, East Saginaw, Mich.  
*Superintendent of Telegraph*, C. S. CHENEY, East Saginaw, Mich.  
*General Freight Agent*, A. PATRIARCHE, East Saginaw, Mich.  
*Attorney*, W. L. WEBBER, East Saginaw, Mich.

DIRECTORS.

W. W. CRAPO, New Bedford, Mass.  
 LOWM SNOW, New Bedford, Mass.  
 GEORGE COPPELL, New York City, N. Y.  
 J. LEWIS STACKPOLE, Boston, Mass.  
 FRANCIS V. PARKER, Boston, Mass.  
 JOHN W. MACKINTOSH, Boston, Mass.  
 LEWIS PIERCE, Portland, Maine.  
 H. C. POTTER, East Saginaw, Mich.  
 WM. L. WEBBER, East Saginaw, Mich.  
 H. C. POTTER, JR., East Saginaw, Mich.  
 WM. H. TOUSEY, Bay City, Mich.

Terms expire third Wednesday in May.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—August 31, 1880.

Number of stockholders at date of last election,	-	-	-	-	-	-	1,634
Number of stockholders in Michigan at same date,	-	-	-	-	-	-	12

Amount of full paid stock held in Michigan at same date, - - - \$142,700 00

Date of annual meeting of stockholders,—Third Wednesday in May.

Fiscal year of company ends,—December 31.

General offices of the company are located at East Saginaw, Mich.

## REMARKS.

This company now owns and operates a system consisting of roads heretofore reported separately as the Flint & Pere Marquette, Saginaw & Clare County, Saginaw & Mount Pleasant, and Manistee Railroads, but all consolidated with the F. & P. M. Company, January 30, 1889. Included also in the system is the property of the Port Huron & Northwestern Railroad Co., acquired during the year, under the provisions of Act No. 10, Session Laws of 1889, this report including its business since April 1, of the year under report, and all other details as to conditions of property or at close of same period.

COMMISSIONER OF RAILROADS.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$2,332,279 60
Total expenses, including taxes, - - - - -	\$1,552,164 33	
Net income, - - - - -		780,115 27
Interest on funded debt, - - - - -	\$444,962 23	
Interest on unfunded debt, - - - - -	12,147 82	
	\$457,110 05	
Rentals of buildings, tracks, etc., - - - - -		\$95,299 01
Surplus of P. H. & N. W. division operations carried to construction account, - - - - -	37,889 80	
Balance applicable to dividends, - - - - -		380,414 43
Dividends declared, 6%, - - - - -	380,520 00	
Balance for the year, - - - - -	\$105 57	
Balance (profit and loss) last year, - - - - -		\$552 49
Balance forward to next year, - - - - -	446 92	
	\$552 49	\$552 49

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, - \$10,000,000 00

Par value of shares, - - - - -	\$100 00	
No. of shares issued, - - - - -	96,402	
Amount paid in on common, - - - - -	\$3,298,200 00	
Amount on preferred, - - - - -	6,342,000 00	
Amount shares not issued,—number, { Preferred, 1,580 }	359,800 00	
	Common, 2,018 }	

Total amount as per books of the company, 10,000,000 00

Paid in per mile of road owned by company,

—624.94 miles, - - - - - \$16,001 52

### ANALYSIS OF DEBT ACCOUNTS.

#### FUNDED DEBT.

Class, Character, and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount Outstanding.
Holly, Wayne & Monroe, January 1, 1870.....	8%	January 1, 1901.....	New York.....	\$1,000,000 00
F. & P. M. 6's, October 1, 1880.....	6%	October 1, 1920.....	New York.....	3,999,000 00
F. & P. M. 5's, May 1, 1889.....	5%	May 1, 1939.....	New York.....	1,000,000 00
P. H. & N. W. division, 5's, April 1, 1889.....	5%	April 1, 1939.....	New York.....	2,800,000 00
5% equipment, November 1, 1887.....	5%	\$40,000 annually.....	Boston.....	820,000 00
Total funded debt.....				\$9,119,000 00

#### UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For construction.....		
For equipment.....		
For real estate.....		
For renewals.....		
For miscellaneous.....		
For current balances.....		\$741,882 57
Total unfunded debt.....		\$741,882 57

#### RECAPITULATION.

Total funded debt,	- - - - -	\$9,119,000 00
Total unfunded debt,	- - - - -	741,882 57
Total debt liabilities,	- - - - -	\$9,860,882 57
Amount of debt liabilities per mile of road,—624.94 miles,	- - - - -	15,778 94
Total amount of stock and debt,	- - - - -	19,860,882 57
Stock and debt per mile of road,—624.94 miles,	- - - - -	31,780 46

#### GENERAL BALANCE SHEET.—Dr.

Construction and equipment account,	- \$19,918,086 82	
Other investments:		
F. & P. M. steamers, four,	- 336,404 83	
Dining room and laundry property,	- 6,206 74	
	_____	\$20,260,698 39
Cash items:		
Cash,	- - - - - \$123,575 94	
Due from agents,	- - - - - 70,659 71	
	_____	194,235 65

## Other assets:

Materials and supplies,	\$163,528 51	
Debit balances from companies and individuals,	83,801 63	
F. & P. M. preferred stock unsold,	158,000 00	
F. & P. M. common stock unsold,	201,800 00	
		<u>\$607,130 14</u>
Total,		\$21,062,064 18

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	\$10,000,000 00	
Funded debt,	9,119,000 00	
		<u>\$19,119,000 00</u>
Unfunded debt:		
Interest unpaid, coupons not due,	\$106,034 99	
Dividends unpaid, payable Feb. 15,	190,260 00	
Notes payable,	124,000 00	
Vouchers and accounts,	321,587 58	
		<u>741,882 57</u>
Profit and loss or income accounts,		1,201,181 61
Total,		<u>\$21,062,064 18</u>

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment,	\$19,918,086 82
Average cost per mile of road, not including sidings,—624.94 miles,	31,871 91
Proportion of cost for Michigan,	19,918,086 82

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE AND BRANCHES.

Extensions, new sidings and widening gauge,	\$3,848,445 27
New buildings, tanks, etc.,	40,340 15
New fences,	19,604 06
Machinery and tools,	808 62
New locomotives,	57,467 09
New cars and snow plows,	72,858 25
	<u></u>
Total charges to property account as above,	\$4,039,523 44
Amounts credited,	98,513 50
	<u></u>
Net addition to property account,	\$3,941,009 94



## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

## Main line and branches:

Local fares, - - - - -	\$743,610 63	
Through fares, - - - - -	32,208 07	
<hr/>		
Total passenger fares, - - - - -	\$775,818 69	
Express and baggage, - - - - -	37,613 57	
Mails, - - - - -	48,610 63	
Other sources, - - - - -	20,994 66	
<hr/>		
Total passenger department earnings, - - - - -		\$883,037 55
Proportion for Michigan, - - - - -	\$883,037 55	
Per train mile, - - - - -		77
Per mile of road, - - - - -	1,413 00	

## FREIGHT EARNINGS.

## Main line and branches:

Local traffic, - - - - -	\$1,297,500 86	
Through traffic, - - - - -	151,741 19	
<hr/>		
Total traffic, - - - - -	\$1,449,242 05	
<hr/>		
Total freight department earnings, - - - - -		\$1,449,242 05
Proportion for Michigan, - - - - -	\$1,449,242 05	
Per train mile, - - - - -		1 32
Per mile of road, - - - - -	2,319 01	
<hr/>		
Total transportation earnings, - - - - -		\$2,332,279 60
Transportation earnings per mile of road, - - - - -	\$3,732 01	
Transportation earnings per train mile, - - - - -		1 87
<hr/>		
Total earnings from operation of road, - - - - -		2,332,279 60
Total earnings per mile of road, - - - - -	\$3,732 00	
Total earnings per train mile, - - - - -		1 87
Proportion of taxable earnings for Michigan, - - - - -		\$2,332,279 60
Total taxable earnings per mile of road in Michigan, - - - - -	2,332,279 60	
Net earnings steamer route, etc., - - - - -		95,299 01
<hr/>		
Total income from all sources, - - - - -		\$2,427,578 61
Proportion of income for Michigan, - - - - -		2,427,578 61

## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track, - - - - -	\$156,234 97
Renewals of ties, - - - - -	31,663 12
Repairs of bridges, including culverts and cattle guards, -	26,348 07
Repairs of fences, road crossings, and signs, - - - - -	23,329 24
Repairs of buildings, - - - - -	23,659 31
Repairs of shop tools and machinery, - - - - -	5,315 76
Repairs of docks, - - - - -	536 16
Boarding cars, - - - - -	424 78
Total, - - - - -	<hr/> \$267,511 41

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives, - - - - -	\$92,565 67
Repairs of passenger cars, - - - - -	50,717 87
Repairs of freight cars, - - - - -	55,619 21
Total, - - - - -	<hr/> \$198,902 75

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	\$172,182 36
Water supply, - - - - -	11,381 56
Oil and waste, - - - - -	29,533 64
Locomotive service, - - - - -	174,049 07
Passenger train service, - - - - -	67,639 90
Passenger train supplies, - - - - -	7,622 13
Freight train service, - - - - -	148,702 18
Freight train supplies, - - - - -	3,653 62
Mileage of freight cars, - - - - -	3,161 60
Telegraph expenses (maintenance and operating), - - -	26,180 11
Damage and loss of freight and baggage, - - - - -	1,368 75
Damages to property and cattle, - - - - -	2,983 23
Personal injuries, - - - - -	5,251 50
Agents and station service, - - - - -	210,295 71
Station supplies, - - - - -	12,982 31
Total, - - - - -	<hr/> \$876,987 67

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company, - - -	\$32,208 50
Salaries of clerks in general offices, - - - - -	37,711 00
Law expenses, - - - - -	13,066 30
Insurance, credit, - - - - -	3,250 80
Stationery and printing, - - - - -	15,339 23
Outside agencies and advertising, - - - - -	15,554 29
Contingencies, - - - - -	19,609 17
Taxes, - - - - -	54,894 70
Track rental, - - - - -	21,190 67
Engineering, - - - - -	2,439 44
Total, - - - - -	<hr/> \$208,762 50

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - -	17.23	\$267,511 41
Maintenance of motive power and cars, - - -	12.82	198,902 75
Conducting transportation, - - -	56.50	876,987 67
General expenses, including taxes, - - -	13.45	208,762 50
Total operating expenses and taxes, - - -		<u>\$1,552,164 33</u>
Operating expenses and taxes per mile of road,	\$2,483 01	
Operating expenses and taxes per train mile run,		
for trains earning revenue,—1,249,138 miles,	1 24	
Proportion of operating expenses and taxes for Michigan:		
Main line, - - - - -	1,552,164 33	
Total proportion of expenses for Michigan,		<u>\$1,552,164 33</u>
Percentage of expenses to earnings,—66.55%.		
Net earnings per mile of road, - - -	1,248 30	
Net earnings per train mile, - - -	63	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Monroe to Ludington, December 1, 1874.  
 From City of Saginaw, Belt Line, June 16, 1889.  
 From Manistee Branch, Manistee Junction to Manistee, January 2, 1882.  
 From Port Huron to East Saginaw, February 21, 1882.  
 From Port Huron to Sand Beach, September 13, 1880.  
 From Palms Junction to Port Austin, December 11, 1882.  
 From Port Huron to Almont, October 3, 1882.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Monroe to Ludington, - - -	253.34	
Total length completed, - - - - -		<u>253.34</u>

## BRANCHES.

Flint River Branch, - - -	19.51
East Saginaw to Bay City, - - -	12.68
St. Clair Branch, - - -	4.65
City of Saginaw Belt Line, - - -	5.19
Zilwaukee Spur, - - -	2.51
West Shore Branch, - - -	1.68
Coleman Branch, - - -	11.02
Mt. Pleasant Branch, - - -	14.51
Saginaw and Clare County Railroad, - - -	32.35
Manistee Railroad, - - -	26.53

	Miles, 100ths.	Miles, 100ths.
Port Huron Division, - - - -	90.34	
Sand Beach Division, - - - -	70.25	
Almont Division, - - - -	33.75	
Port Austin Division, - - - -	34.50	
Black River Division, - - - -	12.13	
Total length of branches owned by company,		371.60
Total length of branches owned by company in Michigan, - - - -	371.60	
Total length of road belonging to this company, - -		624.94
Total length of road belonging to this company in Michigan, - - - -	624.94	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated, - -	269.59	
Aggregate length of tracks in Michigan belonging to this company, computed as single track, - - -		894.53
Gauge of track, 474.31 miles, 4 feet 8½ inches.		
Gauge of track, 150.63 miles, 3 feet.		
Total miles operated by the company, - - -	Total Miles. In Michigan. 624.94	624.94

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of	22; aggregate length, feet,	1,979.50
Iron bridges, number of	16; aggregate length, feet,	1,907
Combination bridges, number of	9; aggregate length, feet,	939
Wooden trestles, number of	128; aggregate length, feet,	17,530
Total, - - - -	175; - - - -	22,355.50

*Draw Bridges in Michigan.*

How many on your line? - - - - 4

Where located, when built, and length of draw span:

- One East Saginaw, built 1876, Howe truss, wood, 168 feet.
- One East Saginaw, built 1876, Howe truss, wood, 142.50 feet.
- One South Saginaw, built 1889, iron Howe truss, wood, 189 feet.
- One Port Huron, built 1881, iron Howe truss, wood, 140 feet.

Character of structure:

Two spans Howe truss, two spans iron truss.

Material of which constructed:

Iron.

Height above water, and depth of water under bridge:

One 15 feet, one 6 feet.

How swung, by engine or hand power?

Hand.

Approaches, straight or curved:

Two straight and two curved.

Do you require all trains to come to a full stop before crossing a draw, and how are they signalled?

All trains stop unless signalled by hand.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Lake Shore & Michigan Southern Railroad at Carlton.

Wabash, St. Louis & Pacific Railroad at Romulus.

Michigan Central Railroad Main Line at Wayne.

Michigan Central Railroad, Bay City Division, at Otter Lake, Vassar, Saginaw City Junction, Saginaw City, J., L. & S. Crossing and Bay City.

Michigan Central Railroad, Belt Line, at Bay City.

Detroit, Lansing & Northern Railroad at Plymouth.

Grand Trunk, Air Line, at Wixom.

Detroit, Grand Haven & Milwaukee Railway at Holly.

Chicago & Grand Trunk Railway at Flint.

Cincinnati, Saginaw & Mackinaw Railroad at South Saginaw.

Toledo, Ann Arbor & North Michigan Railroad at Clare.

Grand Rapids & Indiana Railroad at Reed City.

Lake County Railroad at Branch.

Danaher's Logging Railroad at Manistee Junction.

Manistee & Luther Railroad at Eastlake.

Chicago & West Michigan Railway at Baldwin.

Manistee & Northeastern Railroad at Manistee.

Grand Trunk Railway at Port Huron and Grand Trunk Junction.

Pontiac, Oxford and Northern Railroad at Clifford.

At what crossings are interlocking and derailing switches in operation?

Michigan Central, Wayne; 2 places in Saginaw.

Cincinnati, Saginaw & Mackinaw; 3 places East Saginaw.

Chicago & West Michigan Railway; Baldwin.

Manistee & North Eastern, Manistee.

Junction of Bay City Branch & Main line East Saginaw.

What pattern or patterns have you adopted?

Use the Allentown, Union Switch and Signal Company's and Gravitt.

Number of crossings of highways at grade in this State, 719

Number of crossings of highways at grade in this State at which there are gates or flagmen, 25

Number of crossings of highways over or under railroad, 11

Over,—3, under,—8, 3

Number of highway bridges 18 feet above track, None.

Number of highway bridges less than 18 feet above track, Yes.

Have safety guards been erected at over-head obstructions, Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883, Yes.

How are they treated? Hart guard and blocks.

*Stations.*

Number of stations on whole line, 140

Same in Michigan, 140

*Employés.*

Number persons regularly employed on all roads operated by company, including officials, - - - - -	2,263
Same in Michigan, - - - - -	2,263

Classify your employés as per following list:

	Number.
Baggagemen and brakemen, - - - - -	243
Conductors, - - - - -	82
Engineers, - - - - -	99
Firemen, - - - - -	105
Laborers, - - - - -	703
Shopmen, - - - - -	313
Yardmen, - - - - -	115
Others, - - - - -	603

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - -	624.94
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Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed:

Midland, - - - - -	9.00
Clare, - - - - -	27.00
Isabella, - - - - -	7.00
Mason, - - - - -	20.00
Lake, - - - - -	9.00
Manistee, - - - - -	7.00
Osceola, - - - - -	.50
St. Clair, - - - - -	4.00
Lapeer, - - - - -	3.00
Sanilac, - - - - -	6.00
Huron, - - - - -	20.00
Total miles required, - - - - -	112.50

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	118
Average length of sections,—miles, - - - - -	11.25
Average number of men in each section gang, - - - - -	4
Number of new ties put in whole line during the year, - - - - -	560,776
Number of new ties put in track in Michigan, - - - - -	560,776
Average number of new ties per mile of road, - - - - -	897
New rails put in track:	
Steel (tons, 13,430.19) miles,—130.32.	
Total miles of track laid with new rails, - - - - -	130.32

*Bridges and Culverts.*

Amount of trestle work replaced with earth during the year, —linear feet, - - - - -	None.
New bridges built during the year,—number, - - - - -	12

Location.	Kind.	Material.	Month Built.	Feet in Length.
Mount Pleasant branch.....	Girder.....	Iron.....	December.....	36
Mount Pleasant branch.....	Girder.....	Iron.....	December.....	36
Mount Pleasant branch.....	Girder.....	Iron.....	December.....	36
Clare.....	Girder.....	Iron.....	December.....	60
Reed City.....	Girder.....	Iron.....	December.....	60
South Seginaw.....	Through truss sw'g.....	Iron.....	June.....	189
South Seginaw.....	Through comb't'n.....	Wood and Iron.....	June.....	260
South Seginaw.....	Girder.....	Iron.....	June.....	40
South Seginaw.....	Pile Trestle.....	Wood.....	June.....	508
Two miles west of Mayville.....	Pile Trestle.....	Wood.....	June.....	67
One-half mile west of Mayville.....	Pile Trestle.....	Wood.....	June.....	52
East of Avoca.....	Iron girder & truss.....	Iron.....	June.....	640
Total.....				1,970

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender,	89	\$618,169 15
Number of locomotives of 20 to 30 tons weight, exclusive of tender,	14	54,500 00
Total,	103	\$672,669 15
Number of passenger cars—12-wheel, including official cars,	2	500 00
Number of passenger cars—8-wheel, including official cars,	94	104,400 00
Number of express and baggage cars,	22	15,600 00
Number of box freight cars,	1,593	222,150 00
Number of stock cars,	29	4,150 00
Number of platform cars,	1,120	105,625 00
Number of coal cars,	210	30,500 00
Number of conductors' way cars,	39	11,300 00
Other cars,	254	40,750 00
Total,	3,363	\$1,207,644 15

Number of locomotives equipped with power brakes, 42

Number of passenger-train cars equipped with power brakes, 117

Number of freight cars equipped with power brakes, None.

What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse automatic air brake.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? The M. C. B. Standard.

How are your passenger cars heated? With the Peter Smith hot water and Condon heaters and Baker and Spear heaters.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year,	-	-	148,184
Miles run by freight trains during the year,	-	-	784,867
Miles run by mixed trains,	-	-	316,087
Total mileage of trains earning revenue,	-	-	1,249,138

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried,	16,714		
Number of local passengers carried,	1,145,165		
Total number of passengers carried,	1,161,879		

Total passenger mileage, or passengers carried one mile,	31,132,093		
Average distance traveled by each passenger,	-	26	
Average amount received from each passenger,	-		\$0 66.000
Average rate of fare per mile for through passengers,	-		02.370
Average rate of fare per mile for local passengers,	-		02.497
Average rate of fare per mile for all passengers,	-		02.492

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	133,968		
Number of tons of local freight carried,	1,462,920		
Total tons of freight carried,	1,596,888		

Total mileage of through freight,	-	24,986,373	
Total mileage of local freight,	-	108,062,505	

Total freight mileage, or tons carried one mile, 133,048,878

Average ton haul for through freight,	-	187	
Average ton haul for local freight,	-	74	
Average ton haul for all freight,	-	83	
Average amount received for each ton haul,	-		\$0 90.800
Average rate per ton per mile, received for through freight,	-		00.607
Average rate per ton per mile, received for local freight,	-		01.201
Average rate per ton per mile, received for all freight,	-		01.089

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	59,769
Flour,	75,442
Provisions (beef, pork, lard, etc.),	57,463
Animals,	12,271
Lumber and forest products,	1,048,564
Coal,	16,024
Plaster, lime and cement,	13,542



	Tons.
Salt, - - - - -	64,296
Stone, brick and sand, - - - - -	13,739
Manufactures,—articles shipped from point of production, - - - - -	28,161
Merchandise and other articles not enumerated above, - - - - -	144,839
Total forwarded, - - - - -	1,534,110

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	62,889	3.94
Flour, - - - - -	76,162	4.77
Provisions (beef, pork, lard, etc.), - - - - -	61,165	3.83
Animals, - - - - -	12,850	.80
Lumber and forest products, - - - - -	1,048,802	65.68
Coal, - - - - -	34,163	2.14
Plaster, lime and cement, - - - - -	15,230	.95
Salt, - - - - -	64,348	4.03
Stone, brick and sand, - - - - -	14,083	.88
Manufactures,—articles shipped from point of production, - - - - -	35,736	2.24
Merchandise and other articles not enumerated above, - - - - -	171,460	10.74
Total tons carried, - - - - -	1,596,888	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company. Pays \$30,975.00 per annum for a tonnage equal to 10,000 pounds average hauled 262 miles daily. General express business; handle their own freight at depot.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

371 miles, Western Union Telegraph Company.

218 miles, Flint & Pere Marquette Railroad Company.

## TRANSPORTATION COMPANIES.

*Sleeping, Drawing-Room and Palace Car Companies.*

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Pullman Palace Car Company, Chicago Illinois, - - - \$1,110 30  
Mileage 3 cents per mile.

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

National Dispatch Line,—N. C. Co., St. Albans, Vt.,	\$1,058 72
National Dispatch Line,—C. B. L., St. Albans, Vt.,	51 51
Flint & Pere Marquette railroad,—G. E. L., Detroit, Mich.,	31 33
Flint & Pere Marquette railroad,—C. E. L., Detroit, Mich.,	134 08
West Michigan, Equipment Co., Grand Rapids, Mich.,	38 41
Silas Kilbourne & Co. Grand Rapids, Mich.,	6 27
Merchants' Despatch Transportation Co. New York, N. Y.,	5,627 31
Standard Oil Co. New York, N. Y.,	463 51
Swift Refrigerator,—C. Express Line, Chicago, Ill.,	174 95
Tiffney Refrigerator,—C. Express Line, La Fayette, Ind.,	56 65
Armor Palace,—Horse Cars, Chicago, Ill.,	16 78
American Refrigerator Transportation Co., St. Louis, Mo.,	33 07
Union Iron Co., Detroit, Mich.,	306 38
Peerless Tank Line, Cleveland, O.,	107 16
Armour Refrigerator Line, Chicago, Ill.,	24 30
Columbus & Hocking Coal & Iron Co., Columbus, O.,	119 42
E. C. Walker, Detroit, Mich.,	11 53
Michigan Salt Line, Saginaw, Mich.,	23 09
Street's Stable Car Line, Chicago, Ill.,	8 52
Ohio & Western Coal & Iron Co., Columbus, O.,	1 82
S. Cupples, Wooden Ware Co., Grand Rapids, Mich.,	6 24
Eagle Consolidated Refining Co., Cleveland, O.,	21 79
Frazer Lubricating Co., Chicago, Ill.,	91 64
Standard Oil Co., barrel racks, Cleveland, O.,	2 12
St. Charles, Car Co., St. Louis, Mo.,	55
G. H. H., Freight Car Line, Louisville, Ky.,	5 94
W. P. Rend & Co., Chicago, Ill.,	16 74
Nelson Morris & Co., Chicago, Ill.,	. 68
Anglo American Provision Co., Chicago, Ill.,	2 03
Marsh & Harwood Co., Cleveland, O.,	2 04
Lima Oil Co., Lima, O.,	5 85
Gem Oil Line, Toledo, O.,	43 28
Kansas City Dressed Beef Line, Kansas City, Mo.,	17 54
St. Louis Refrigerator Car Co., St. Louis, Mo.,	3 48
Chicago Car & Coal Co., Chicago, Ill.,	1 17
Canada Cattle Car Co., Chicago, Ill.,	2 79
Southern Iron Car Lines, Atlanta, Ga.,	3 76
Iron Car Express & Coal Line, Philadelphia, Pa.,	110 71
J. G. Brill & Co., Philadelphia, Pa.,	3 84
American Tank Line, Cleveland, O.,	2 04
Paragon Refining Co., Toledo, O.,	96
Somers Coal Co., Columbus, O.,	12 01
Total,	\$8,652 01

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1899.

## KILLED.

January 1, Matthew Haley, brakeman, East Saginaw. Knocked off car by lumber projecting from pile over track; company not responsible.

January 30, John Keep, car repairer, East Saginaw. Was on top of car while passing to another, cars separated and he fell; company not responsible.

February 11, James Tubbs, hotel keeper, Loomis. In attempting to cross track in face of approaching engine; company not responsible.

February 28, David John, Indian, Fountain. Intoxicated on track.

June 5, John Riley, tramp, Midland. Stealing a ride.

June 15, Mrs. Harriett Lowell, Mt. Morris. Attempting to cross track in face of approaching train.

June 21, W. H. Arnolds, brakeman, Midland. Logs rolled from car.

July 20, M. P. Linsley, brakeman, Saginaw Junction. Crushed between way-car and tender; company not responsible.

August 3, Henry White, farmer, Birch Run. Intoxicated on track; company not responsible.

August 3, Otto Schmidt, East Saginaw. Walked on track in face of approaching engine; company not responsible.

August 19, Philip Marsh, switchman, East Saginaw. Coupling; projecting lumber, cars not loaded per orders.

September 1, Hy. H. Parmenter, Northville. Stealing ride and jumped from train; company not responsible.

September 10, Thomas Barrow, boy, C. & G. T. Junction. Attempting to board construction train while in motion; company not responsible.

October 12, Patrick Clancey, Flint. Intoxicated; company not responsible.

December 28, Miss Ann Gunn, Clio. Laid down upon track and run over; company not responsible.

## INJURED.

January 7, E. E. Wilkins, brakeman, Lake. Coupling; carelessness.

January 14, C. W. Rowe, brakeman, Lake. Fell from train; lack of caution.

January 26, George G. King, switchman, East Saginaw. Coupling; carelessness.

January 28, Jno. Gateman, log unloader, Meridian Line. Unloading logs; lack of caution.

January 30, Wm. Harmod, engineer, Flint. Jumped from engine; lack of caution.

February 2, Albert Conley, Switchman, East Saginaw. Coupling; carelessness.

February 6, J. J. Lamb, brakeman, Midland. Flat car lifted from track on to platform of caboose when train backed to couple; accidental.

February 7, Joe Kawacka, East Lake. Trespasser on track; struck by engine.

February 15, D. C. Hoabler, switchman, Bay City. Coupling; accidental.

February 21, Wm. Bissell, brakeman, East Saginaw. Coupling; carelessness.

February 28, F. H. Robison, switchman, East Saginaw. Coupling; carelessness.

March 3, Albert Wellmand, brakeman, Flint. Went to sleep on car and fell off.

March 16, J. H. Grimshaw, conductor, Wayne Junction. Coupling; carelessness.

March 11, Harvey Shrink, foreman, Ludington. Collision; accidental upon his part.

April 2, Charlie Louie, Indian, Reed City. Intoxicated on track.

May 4, N. A. June, brakeman, South Saginaw. Coupling; carelessness.

May 8, Jno. McKune, brakeman, Clare. Coupling; carelessness.

May 10, Alexander French, trespasser, Bay City. Asleep under car.

May 13, Jno. Monihan, brakeman, Farwell. Coupling; carelessness.

May 24, Matthew McAllen, brakeman, Flint. Coupling; lack of caution.

May 29, Burt Sine, brakeman, Milford. Coupling; carelessness.

June 3, Samuel Welsh, switchman, East Saginaw. Fell from car.

June 15, James Pickering, section man, Farwell. Fell from hand car; lack of caution.

June 59, Samuel McEwen, Bay City. Attempting to cross track in face of approaching train.

July 20, A. O. McDonald, switchman, East Saginaw. Coupling; carelessness.

August 12, Charles Petoskey, laborer, Vassar. Rail fell upon leg; lack of caution.

August 20, James Rattis, section man, Hatton. Jumping from hand car; lack of caution.

September 6, George Perkins, brakeman, Wayne Junction. Coupling; carelessness.

September 6, James McLemon, Yale. Coupling; carelessness.

September 9, Wm. McClain, brakeman, East Saginaw. Coupling; carelessness.

September 28, Walter Coats, section man, Novi. On hand car and struck by freight train.

October 1, Matt McCallum, brakeman, Bay City. Coupling; carelessness.

October 8, Walter Shattuck, brakeman, Wayne Junction. Coupling; carelessness.

October 13, George Ellmore, conductor, East Saginaw. Coupling; carelessness.

November 5, Jno. Clark, brakeman, Wayne Junction. Coupling; carelessness.

November 12, Frank Twiss, Jr., brakeman Ewart. Coupling; carelessness.

November 22, Jno. F. Leary, switchman, East Saginaw. Getting on locomotive foot board; carelessness.

December 10, George Eckfield, brakeman, Harrison Branch. Coupling; carelessness.

December 9, Samuel Havis, of vinegar works, Holly. Fell from car; lack of caution.

December 23, Barney Langtree, conductor, Clare. Fell from car of logs; accidental.

December 30, W. J. Naldrett, passenger, Northville. Jumped from train; misconduct.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....					2	
Coupling cars.....		1			22	
Derailments.....						
Falling from trains.....		2			5	1
Frogs.....						
Getting on and off trains.....						
Highway crossings.....						
Miscellaneous.....		2			6	1
Overhead obstructions.....						
Trespassers on trains.....			3			
Trespassers on tracks.....			7			4
Total.....		5	10		35	6

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	-	-	-	15
Number of persons injured during the year,	-	-	-	41
Number of casualties purely accidental,	-	-	-	7
Number resulting from lack of caution, carelessness, or misconduct,	-	-	-	35
Persons killed or injured while intoxicated,	-	-	-	4
Trespassers and tramps killed or injured,	-	-	-	10
Suicides,	-	-	-	—

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

Employés.	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....	3	19	22
Conductors.....		2	2
Engineers.....		1	1
Firemen.....		1	1
Laborers.....		2	2
Switchmen.....	1	7	8
Car Repairer.....	1		1
Not classified above.....		3	3
Total.....	5	35	40

STATE OF MICHIGAN, }  
COUNTY OF SAGINAW, } ss.

Henry C. Potter, Vice President and General Manager, and Gilbert W. Ledlie, Auditor, of the Flint & Pere Marquette Railroad Company being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

HENRY C. POTTER.

GILBERT W. LEDLIE.

Subscribed and sworn to before me this 7th day of May, A. D. 1890.

ALFRED W. NEWTON, *Notary Public.*

ANNUAL REPORT  
OF THE  
FRANKFORT & SOUTHEASTERN RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed May 14, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, HENRY DAY, New York City, N. Y.  
*Secretary* D. B. BUTLER, Frankfort, Mich.  
*Treasurer*, S. M. McCALL, Boston, Mass.  
*Superintendent*, ARTHUR WARD, Frankfort, Mich.  
*Auditor*, D. M. WEGNER, Frankfort, Mich.

DIRECTORS.

HENRY DAY, New York, N. Y.  
S. W. McCALL, Boston, Mass.  
A. C. HALL, New York, N. Y.  
D. B. BUTLER, Frankfort, Mich.  
C. C. CASE, Benzonia, Mich.

Terms expire June 4, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—December 2, 1885.

Number of stockholders at date of last election,	-	-	-	-	-	-	7
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Number of stockholders in Michigan at same date,	-	-	-	-	-	-	3
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Amount of full paid stock held in Michigan at same date,	-	-	-	-	-	-	\$800 00
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Date of annual meeting of stockholders,—First Wednesday of June.

Fiscal year of company ends,—December 31.

General offices of the company are located at,—Frankfort, Mich.

REMARKS.

This road was not opened for traffic until December, 1889.

COMMISSIONER OF RAILROADS.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$100,000 00
Par value of shares, - - - \$100 00	
Average price received per share, 100 00	
No. of shares issued, - - - 571	
Amount paid in on common, -	\$57,100 00
Total amount paid in as per books of the company, -	57,100 00
Paid in per mile of road owned by company, —22 miles, - - - - -	\$2,595 46

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	When Due.	Interest.		Amount.
		Rate.	Payable.	
First mortgage dated July 1, 1899.....	Jan. & July..	6%	New York City..	\$222,000 00
Total funded debt.....				\$222,000 00

## UNFUNDED DEBT.

Funded debt, - - - - - None.

## RECAPITULATION.

Total funded debt, - - - - -	\$220,000 00
Total debt liabilities, - - - - -	\$220,000 00
Amount of debt liabilities per mile of road,—22 miles, -	10,000 00
Total amount of stock and debt, - - - - -	\$277,100 00
Stock and debt per mile of road, - - - - -	12,595 46

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year, - - - \$13,200 00  
Was it paid for the last year? Yes.

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction, - - - - -	\$266,805 60
Average cost of construction per mile of road, not including sidings,—22 miles, - - - - -	12,127 53
Proportion of cost of construction for Michigan, - - -	266,805 60



## DESCRIPTION OF ROAD.

Date when road was opened for use between its present termini:  
November 25, 1889.

MAIN LINE.		Miles. 100ths.	Miles. 100ths.
Length completed in Michigan,	- - -	22.00	
Total length completed,	- - -		22.00
Total length of road belonging to this company,		22.00	
Total length of road belonging to this company in Michigan,			22.00
Aggregate length of sidings, spurs, and other tracks not above enumerated,	- - -	2.00	
Same in Michigan,	- - -		2.00
Aggregate length of tracks belonging to this company, computed as single track,	- - -	24.00	
Same in Michigan,	- - -		24.00
Gauge of track, 4 feet, 8½ inches.			

STATE OF MICHIGAN, }  
COUNTY OF BENZIE, } ss.

Henry Day, President, D. B. Butler, Secretary, of the Frankfort & South Eastern Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

HENRY DAY.  
D. B. BUTLER.

Subscribed and sworn to before me this 6th day of May, A. D. 1890, as to D. B. Butler, Secretary.

CHAS. BURMEISTER, *Notary Public.*

Subscribed and sworn to this 12th day of May 1890, as to Henry Day, President.

LUCIEN H. BEERS,

*Commissioner for Michigan in New York.*

ANNUAL REPORT  
OF THE  
GRAND RAPIDS & INDIANA RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed May 14, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President and General Manager*, W. O. HUGHART, Grand Rapids, Mich.

*Vice President, and Treasurer*, W. R. SHELBY, Grand Rapids, Mich.

*Secretary and Ass't to President*, J. H. P. HUGHART, Grand Rapids, Mich.

*Auditor*, F. A. GORHAM, Grand Rapids, Mich.

*Division Superintendents:*

\*J. M. METHEANY, Northern Division, Grand Rapids, Mich.

P. S. O'ROURKE, Southern Division, Fort Wayne, Ind.

*Chief Engineer*, G. S. JOHNSON, Grand Rapids, Mich.

*General Passenger Agent*, C. L. LOCKWOOD, Grand Rapids, Mich.

*Acting General Freight Agent*, E. C. LEAVENWORTH, Grand Rapids, Mich.

*General Counsel*, T. J. O'BRIEN, Grand Rapids, Mich.

DIRECTORS.

W. O. HUGHART, Grand Rapids, Mich.

W. R. SHELBY, Grand Rapids, Mich.

H. J. HOLLISTER, Grand Rapids, Mich.

F. B. STOCKBRIDGE, Kalamazoo, Mich.

S. S. COBB, Kalamazoo, Mich.

J. G. WAIT, Sturgis, Mich.

C. F. MUHLER, Fort Wayne, Indiana.

WM. THAW, JR., Pittsburg, Pennsylvania.

J. N. McCULLOUGH, Pittsburg, Pennsylvania.

THOS. D. MESSLER, Pittsburg, Pennsylvania.

GEO. B. ROBERTS, Philadelphia, Pennsylvania.

JOHN P. GREEN, Philadelphia, Pennsylvania.

HENRY H. HOUSTON, Philadelphia, Pennsylvania.

Terms expire March 6, 1891.

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\* Deceased.

## STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—April 1, 1855.

Number of stockholders at date of last election, - - - - - 675

Number of stockholders in Michigan at same date, - - - - - 273

Amount of full paid stock held in Michigan at same date,—Cannot answer.

Date of annual meeting of stockholders,—First Wednesday in March.

Fiscal year of company ends,—December 31.

General offices of the company are located at Grand Rapids, Mich.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$2,495,732 90
Total expenses, including taxes, - - -	\$1,670,353 62	
Net income, - - - - -		\$825,379 28
Interest on funded debt, - - - - -	\$765,925 00	
Interest on unfunded debt, - - - - -	71,052 67	
Rentals of buildings, tracks, etc., - - -	6,000 00	
		842,977 67
Balance for the year, - - - - -	\$17,598 39	
Balance (profit and loss) last year, - - -	175,800 43	
Items not included in above, as follows:		
Advances to C. R. & F. W. R. R. for 1889, -	2,295 11	
Proportion of deficit of Mackinac Transportation Co. for 1889, - - - - -	873 08	
Discounts on bonds sold, - - - - -	4,217 38	
Sundry old accounts paid during 1889, -	3,395 05	
Balance forward to next year, - - - - -		\$204,179 44
	\$204,179 44	\$204,179 44

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$5,000,000 00
Par value of shares, - - - - - \$100 00	
No. of shares issued, - - - - - 49,860	
Amount paid in on common, - - - - -	\$4,986,081 22
Total amount paid in, as per books of the company, -	4,986,081 22
Paid in per mile of road owned by company, -	
—408.49 miles, - - - - -	\$12,206 13

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage, October 1, 1869.....	7%	1899.....	New York.....	\$996,000
F. M. land grant, October 1, 1869.....	7%	1899.....	New York.....	505,000
F. M. land grant, guaranteed, October 1, 1869.....	7%	1899.....	New York.....	3,984,000
Six per cents, August 1, 1884.....	6%	1899.....	New York.....	3,000,000
Five per cents, September 1, 1884.....	5%	1924.....	New York.....	4,104,000
Total funded debt.....				\$12,479,000

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For Construction.....	To be paid.....	\$275,000 00
For Equipment.....	.....	.....
For Real Estate.....	.....	191,750 00
For Renewals.....	.....	.....
For Miscellaneous.....	.....	420,000 00
For Current Balances.....	Pay rolls, vouchers and coupons due January 1, 1890.....	483,153 09
Total unfunded debt.....		\$1,369,903 09

## RECAPITULATION.

Total funded debt,	\$12,479,000 00
Total unfunded debt,	1,369,903 09
Total debt liabilities,	\$13,848,903 09
Amount of debt liabilities per mile of road,—408.49 miles,	33,902 67
Total amount of stock and debt,	\$18,834,984 31
Stock and debt per mile of road,—408.49 miles,	46,108 80

## GENERAL BALANCE SHEET.—Dr.

Construction and equipment account,	\$16,986,267 29
Other investments:	
Capital stock M., G. R. & I. railroad,	\$930 00
Capital stock G. R., I. & M. railroad,	1,350 00
Purchase B. R. & W. railroad,	100,000 00
Stock and investment M. I. Hotel Co.,	44,500 00
Stock and investment M. T. Co.,	117,000 00
	263,780 00
Cash items:	
Cash,	\$294,839 57
Bills receivable,	26,642 43
Due from agents,	71,839 98
	393,321 98

## Other assets:

Materials and supplies,	-	-	-	\$113,496	28
Debit balances from companies and individuals,	-	-	-	183,668	41
6% bonds,	-	-	-	300,000	00
5% bonds,	-	-	-	405,000	00
					<hr/>
					\$1,202,164 69
Balance,	-	-	-	-	189,450 35
					<hr/>
Total,	-	-	-	-	\$18,834,984 31

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	-	-	-	-	\$4,986,081 22
Funded debt,	-	-	-	-	12,479,000 00
					<hr/>
					\$17,465,081 22
Unfunded debt:					
Interest unpaid, including \$137,690.00 due January 1, 1890,	-	-	-	-	\$144,430 00
Notes payable,	-	-	-	-	420,000 00
Vouchers and accounts,	-	-	-	-	254,773 14
Other liabilities:					
Bond and mortgage on real estate,	-	-	-	-	41,750 00
Mackinaw loan,	-	-	-	-	275,000 00
The Philadelphia trust, safe deposit and insurance company, and William H. Barnes, trustees,	-	-	-	-	150,000 00
Lake City extension fund,	-	-	-	-	17,400 94
Due other companies,	-	-	-	-	66,549 01
					<hr/>
					1,369,903 09
					<hr/>
Total,	-	-	-	-	\$18,834,984 31

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment,	-	-	-	\$16,986,267 29
Average cost per mile of road not including sidings, —408.49 miles,	-	-	-	41,583 07
Proportion of cost for Michigan,	-	-	-	14,778,052 54

*Purchased by Present Company.*

When received from construction company,—Dec. 1, 1873.

Original cost to present company of road and equipment,	\$10,848,250 00
Stock issued in 1888 account of original subscriptions,	1,000 00
Amount expended since purchase, account of construction,	5,625,774 01
Amount expended since purchase, account of equipment,	511,243 28

Total cost to date of report,	\$16,986,267 29
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Average cost per mile of road, not including sidings—	
408.49 miles, - - - - -	\$41,583 07
Proportion of cost for Michigan, - - - - -	14,778,052 54

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings, - - -	\$41,908 04	
Second track, - - - - -	2,410 12	
New buildings, - - - - -	17,334 24	
New fences, - - - - -	1,910 76	
Machinery and tools, - - - - -	729 97	
Real estate, - - - - -	11,830 30	
New cars, - - - - -	82,929 81	
	<hr/>	
Total, - - - - -		\$159,053 27

## LEASED OR PROPRIETARY ROADS.

## Muskegon, Grand Rapids &amp; Indiana railroad:

Extensions and new sidings, - - -	\$541 54	
Bridges, - - - - -	2,570 43	
New fences, - - - - -	250 00	
Real estate, - - - - -	601 00	
New locomotives, - - - - -	7,000 00	
	<hr/>	
Total, - - - - -		\$10,899 97
		<hr/>
Total charges to property account as above, - - -		\$169,953 24
Property sold and credited, - - - - -		9,366 01
		<hr/>
Net addition to property account, - - - - -		\$160,587 23

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Roads.	Local Fares.	Through Fares.	Total Passenger Fares.	Express and Baggage.	Mails.	Other Sources.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
Main line and branches.....	\$715,330 99	\$3,573 21	\$718,904 20	\$23,337 23	\$42,516 44	\$21,765 49	\$810,005 35	\$704,690 42	\$1 08	\$1,983 92
<i>Leased or Proprietary Roads.</i>										
Muskegon, Grand Rapids & Indiana Railroad.	20,124 75	32,376 69	52,501 44	2,320 00	3,029 50	653 96	59,304 90	59,304 90	76	1,806 65
Traverse City Railroad.....	7,374 80	14,661 77	22,036 57	1,300 00	1,927 94	439 26	26,723 77	26,723 77	74	1,027 84
Total passenger department earnings.....	\$743,330 54	\$51,131 67	\$794,462 21	\$24,147 23	\$47,473 88	\$22,698 70	\$866,882 02	\$790,619 09	\$1 00	\$1,900 82

## FREIGHT EARNINGS.

Roads.	Local Traffic.	Through Traffic.	Total Traffic.	Other Sources.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
Main line and branches.....	\$1,361,130 71	\$23,643 98	\$1,419,334 69	\$38,432 87	\$1,458,257 56	\$1,233,694 08	\$1 47	\$3,569 87
<i>Leased or Proprietary Roads.</i>								
Muskegon, Grand Rapids & Indiana Railroad.....	23,668 85	70,130 67	96,824 53	2,257 88	98,083 35	98,083 35	3 61	2,661 66
Traverse City Railroad.....	11,568 21	8,365 28	19,948 49	-----	19,948 49	19,948 49	98	767 25
Total freight department earnings.....	\$1,423,467 77	\$107,129 93	\$1,535,597 70	\$40,690 70	\$1,576,288 40	\$1,363,792 42	\$1 52	\$3,844 27

Total transportation earnings,	-	-	-	\$2,472,220	42
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Transportation earnings per mile of road,	-	\$5,245	09
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Transportation earnings per train mile,	-	1	28
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Miscellaneous receipts from operating account,  
other than for transportation, as follows:

From telegraph,	-	-	-	\$12,299	50
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From rentals of tracks or terminals,	-	-	-	11,212	98
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Total,	-	-	-	\$23,512	48
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Distribution of miscellaneous earnings between main line and leased or  
proprietary roads:

COMPANY.	Total Miscellaneous.	Proportion for Michigan.
Grand Rapids & Indiana,	\$22,905 38	\$19,927 33
Muskegon, Grand Rapids & Indiana,	256 32	256 32
Traverse City,	350 78	350 78

Total earnings from operation of road,	-	-	-	\$2,495,732	90
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Total earnings per mile of road,	-	-	-	\$5,297	97
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Total earnings per train mile,	-	-	-	1	29
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Proportion of taxable earnings for Michigan,	-	-	-	2,197,338	84
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Total taxable earnings per mile of road in Michigan,	-	-	-	\$5,255	20
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Total income from all sources,	-	-	-	\$2,495,732	90
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Proportion of income for Michigan,	-	-	-	2,197,881	28
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#### ANALYSIS OF EXPENSES.

##### CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track,	-	-	-	\$209,945	78
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Renewals of rails,	-	-	-	36,328	21
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Renewals of ties,	-	-	-	70,036	85
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Repairs of bridges, including culverts and cattle guards,	-	-	-	32,152	26
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Repairs of fences, road crossings and signs,	-	-	-	32,680	23
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Repairs of buildings,	-	-	-	59,361	82
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Total,	-	-	-	\$440,505	15
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##### CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives,	-	-	-	\$98,752	06
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Repairs of passenger cars,	-	-	-	60,811	27
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Repairs of freight cars,	-	-	-	133,090	92
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Total,	-	-	-	\$292,654	25
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CLASS 3.—*Conducting Transportation.*

Fuel for locomotives,	\$170,873	20
Water supply,	10,081	47
Oil and waste,	14,360	22
Locomotive service,	142,192	09
Passenger train service,	47,512	22
Passenger train supplies,	9,973	65
Mileage of passenger cars,	1,031	44
Freight train service,	77,941	51
Freight train supplies,	1,806	09
Mileage of freight cars,	5,835	94
Telegraph expenses (maintenance and operating),	35,561	39
Damage and loss of freight and baggage,	1,771	01
Damages to property and cattle,	2,149	48
Personal injuries,	3,021	42
Agents and station service,	198,750	21
Station supplies,	14,977	95
Total,	\$737,839	29

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company,	\$27,181	03
Salaries of clerks in general offices,	48,772	09
Law expenses,	9,998	43
Insurance,	4,054	35
Stationery and printing,	22,630	13
Outside agencies and advertising,	15,860	61
Contingencies,	21,374	16
Taxes,	49,484	13
Total,	\$199,354	93

## RECAPITULATION OF EXPENSES.

	Per cent of Expenses.	
Maintenance of way and buildings,	26.37	\$440,505 15
Maintenance of motive power and cars,	17.52	292,654 25
Conducting transportation,	44.17	737,839 29
General expenses, including taxes,	11.94	199,354 93
Total operating expenses and taxes,	100.00	\$1,670,353 62
Operating expenses and taxes per mile of road,	\$3,543	84
Operating expenses and taxes per train mile run, for trains earning revenue,—1,934,771 miles,	86	
Proportion of operating expenses and taxes for Michigan:		
Main line,		\$1,326,273 83

*Leased or Proprietary Roads.*

Muskegon, Grand Rapids & Indiana R. R.,	\$106,394	83
Traverse City R. R.,	39,506	11

Total proportion of expenses for Michigan, - - \$1,472,174 77

Percentage of expenses to earnings,—66.928%.

Net earnings per mile of road, - - - \$1,751 13

Net earnings per train mile, - - - 43

#### DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Fort Wayne, Indiana, to Mackinaw City, Michigan, July 3, 1882.

#### BRANCHES.

From Milton Junction, Michigan, to Carey's, Michigan, 1882.

From Deer Lake, Michigan, to Raignels, Michigan, 1883.

From Missaukee Junction, Michigan, to Jennings, Michigan, 1882.

From Kegotmie, Michigan, to Harbor Springs, Michigan, February 1, 1882.

From Osceola Junction, Michigan, to Olga, Michigan, 1885.

#### MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Crooked Creek to Mackinaw City,	313.48	
In Indiana, from Fort Wayne to Crooked Creek,	53.11	
Total length completed,		366.59
Length of double track on main line,		1.77

#### BRANCHES.

Manistee branch and spurs, from Milton Junction to Carey's and from Deer Lake to Raignels,	21.47	
Milwaukee branch, from Missaukee Junction to Jennings,	7.64	
Harbor Springs branch, from Kegotmie to Harbor Springs,	5.76	
Osceola branch, from Osceola Junction to Olga,	7.03	
Total length of branches owned by company,		41.90
Total length of branches owned by company in Michigan,	41.90	
Total length of road belonging to this company,		408.49
Total length of road belonging to this company in Michigan,	355.38	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,	95.64	
Aggregate length of tracks in Michigan belonging to this company computed as single track,		451.02
Gauge of track, 4 feet 9 inches.		

*Proprietary or Leased Roads Operated by this Company.*

Name, description, and length of each,

	Total Miles.	In Michigan.
Cincinnati, Richmond & Fort Wayne Railroad,	85.60	
Muskegon, Grand Rapids & Indiana Railroad,	36.85	36.85
Traverse City Railroad,	26.00	26.00
Total,	148.45	62.85
Total miles operated by the company,	556.94	418.23

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of,	10; aggregate length, feet,	1,139.20
Stone bridges, number of,	1; aggregate length, feet,	18.80
Iron truss, number of,	1; aggregate length, feet,	130.00
Plate girders, number of,	7; aggregate length, feet,	336.50
Combination bridges, number of,	7; aggregate length, feet,	1,091.00
Wooden trestles, number of,	168; aggregate length, feet,	12,257.15
Total,	194;	14,972.65

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Lake Shore and Michigan Southern Railway at Sturgis, Kalamazoo, Plainwell and Grand Rapids.

St. Louis, Sturgis & Battle Creek Railroad at Sturgis.

Michigan Central Railroad at Wasepi and Kalamazoo.

Chicago & Grand Trunk Railway at Vicksburg.

Cincinnati, Jackson & Mackinaw Railroad at Monteith.

Chicago & West Michigan Railway at Grand Rapids, Mill Creek, Fruitport Junction and Muskegon.

Detroit, Grand Haven & Milwaukee Railway at Grand Rapids.

Toledo, Saginaw & Muskegon Railroad at Cedar Springs.

Colfax & Big Rapids Railroad at Big Rapids.

Detroit, Lansing & Northern Railroad at Big Rapids and Grand Rapids.

Flint & Pere Marquette Railroad at Reed City.

Cadillac & North Eastern Railroad at Cadillac.

Toledo, Ann Arbor & North Michigan Railway at Cadillac.

What railroads cross your road either over or under your grade in this State, and where?

Over,—

Detroit, Grand Haven & Milwaukee Railway near Kinney.

At what crossings are interlocking and derailing switches in operation?

M. C. R. R. at Wasepi.

D. L. & N. and M. C. Railroads at Grand Rapids.

T. S. & M. R. R. at Cedar Springs.

T. A. A. & N. M. R'y at Cadillac.

Smith Lumber Co. at Kalkaska.

What pattern or patterns have you adopted?

Union Switch & Signal Co., Wharton and Allentown.

Number of crossings of highways at grade in this State,	492
Number of crossings of highways at grade in this State at which there are gates or flagmen,	29
Number of crossings at which there are electric or auto- matic signals,	3
What pattern or patterns in use? Pennsylvania Steel Company.	
Number of crossings of highways over or under railroad:	
Over,—5. Under,—1	6
Number of highway bridges 18 feet above track,	5
Number of highway bridges less than 18 feet above track,	None
Have safety guards been erected at over-head obstructions,	Yes.
Are your frogs and guard rails blocked as required by act 174, session laws 1883?	Yes.
How are they treated? Wooden blocks.	

*Stations.*

Number of stations on whole line,	163
Same in Michigan,	143

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials,	2,193
Same in Michigan,	1,898

Classify your employés as per following list:

	Number.
Baggagemen,	20
Brakemen,	127
Conductors,	72
Engineers,	94
Firemen,	99
Laborers,	520
Shopmen,	319
Yardmen,	111
Others,	831

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you?	333.17
Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed.	
Osceola, Lake, Wexford, Missaukee, Grand Traverse, Charlevoix, and Emmet.	
Total miles required,	85.00

*Road Bed and Track.*

Number of track sections in Michigan,	99
Average length of sections—miles,	4.22

Average number of men in each section gang, - - -	4
Number of new ties put in whole line during the year, - -	233,750
Number of new ties put in track in Michigan, - - -	213,573
Average number of new ties per mile of road, - - -	495

New rails put in track:

Steel ( 1,807 tons), 20 miles.

Total miles of track laid with new rails, - - -	20
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*Bridges and Culverts in Michigan.*

Amount of trestle work replaced with earth during year, -	243
—linear feet, - - -	
Amount of culverts replaced with earth during the year, -	4
—linear feet, - - -	
Timber culverts replaced during the year, - - -	15
With sewer pipe,—number, - - -	8
With timber,—number, - - -	7
New bridges built during the year,—number - - -	27
At different points. { Trestles; wood,—feet, - - -	1,801
{ Plate girders; iron,—feet, - - -	144
Total, - - -	1,945

ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - -	46	\$230,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - -	20	60,000 00
Total, - - -	66	\$290,000 00
Number of passenger cars—12 wheel, including official cars, - - -	14	42,000 00
Number of passenger cars—8 wheel, including official cars, - - -	48	120,000 00
Number of express and baggage cars, - - -	24	36,000 00
Number of box freight cars, - - -	1,387	416,100 00
Number of stock cars, - - -	50	15,000 00
Number of platform cars, - - -	1,204	301,000 00
Number of ore and coal cars, - - -	354	88,500 00
Number of conductors' way cars, - - -	46	11,500 00
Other cars as follows:		
Snow plows, 5; tool cars, 7; derrick cars, 2; pile driver, 1; inspection car, 1, - - -	16	8,000 00
Total, - - -	3,143	\$1,328,100 00
Number of locomotives equipped with power brakes, - - -		50
Number of passenger train cars equipped with power brakes, - - -		86
Number of freight cars equipped with power brakes, - - -		4
What patterns of power brakes have you in use, and number of locomotives and cars with each?		

Westinghouse, cars 90, locomotives 45; American, locomotives 5.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? Janney.

How are your passenger cars heated? By steam from locomotive.

### MILEAGE, TRAFFIC, ETC.

#### *Train Mileage.*

Miles run by passenger trains during the year,	-	-	898,046
Miles run by freight trains during the year,	-	-	1,036,725
Total mileage of trains earning revenue,	-	-	1,934,771

#### *Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Number of through passengers carried,	53,483		
Number of local passengers carried,	1,021,400		
Total number of passengers carried,	1,074,883		
Total passenger mileage, or passengers carried one mile,		32,874,483	
Average distance traveled by each passenger,		30.58	
Average amount received from each passenger,			\$0 73.000
Average rate of fare per mile for through passengers,			02.535
Average rate of fare per mile for local passengers,			02.409
Average rate of fare per mile for all passengers,			02.417

#### *Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	155,707		
Number of tons of local freight carried,	1,630,867		
Total tons of freight carried,	1,786,574		
Total mileage of through freight,		11,017,243	
Total mileage of local freight,		144,004,497	
Total freight mileage, or tons carried one mile,		155,021,740	
Average ton haul for through freight,		70.76	
Average ton haul for local freight,		88.30	
Average ton haul for all freight,		86.77	
Average amount received for each ton haul,			\$0 86.000
Average rate per ton per mile, received for through freight,			00.972
Average rate per ton per mile, received for local freight,			00.992
Average rate per ton per mile, received for all freight,			00.991

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain, - - - - -	14,052
Flour, - - - - -	12,931
Provisions (beef, pork, lard, etc.), - - - - -	10,127
Animals, - - - - -	2,919
Other agricultural products, - - - - -	48,862
Lumber and forest products, - - - - -	886,189
Coal, - - - - -	40,045
Plaster, lime and cement, - - - - -	15,175
Salt, - - - - -	5,719
Petroleum, - - - - -	3,391
Railroad iron, iron and steel rails, - - - - -	8,651
Pig and bloom iron, - - - - -	25,872
Other iron and castings, - - - - -	5,439
Ores, - - - - -	38,680
Stone, brick and sand, - - - - -	36,709
Manufactures,—articles shipped from point of production, - - - - -	87,485
Merchandise and other articles not enumerated above, - - - - -	52,555
<b>Total forwarded,</b> - - - - -	<b>1,294,801</b>

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	43,023	2.4
Flour, - - - - -	13,662	.8
Provisions (beef, pork, lard, etc.), - - - - -	10,966	.6
Animals, - - - - -	10,050	.6
Other agricultural products, - - - - -	64,979	3.6
Lumber and forest products, - - - - -	915,342	51.2
Coal, - - - - -	88,448	4.9
Plaster, lime and cement, - - - - -	16,857	.9
Salt, - - - - -	5,823	.3
Petroleum, - - - - -	13,753	.8
Railroad iron, iron and steel rails - - - - -	10,694	.6
Pig and bloom iron, - - - - -	42,501	2.4
Other iron and castings, - - - - -	38,629	2.2
Ores, - - - - -	38,732	2.2
Stone, brick and sand, - - - - -	240,914	13.5
Manufactures,—articles shipped from point of production, - - - - -	127,753	7.2
Merchandise and other articles not enumerated above, - - - - -	104,448	5.8
<b>Total tons carried,</b> - - - - -	<b>1,786,574</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

Adams Express Company; 40% of gross earnings a minimum of \$36,000 per year guaranteed, all freight received and delivered at depots.

The above covers all lines operated by this company.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Telegraph wire, 1,023.4 miles; telephone wire, 40 miles; all belonging to this company.

*Transportation Companies.*

SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Pullman Palace Car Co., Chicago, Ill.,	-	-	-	\$7,541 82
Wagner Sleeping Car Co., New York, N. Y.,	-	-	-	2,041 74

REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

KILLED.

August 12, Abel C. Durfee, trespasser, near Muskegon. Walking on track.

August 16, Robert Gamble, citizen, Grand Rapids. Carelessness; attempting to pass under train at street crossing.

October 16, Abner P. Closson, trespasser, Alba. Intoxicated; stepped in front of train.

December 9, Holden Spink, freight conductor, Tustin. Fell off car and was fatally squeezed; purely accidental.

December 28, N. C. Hodson, citizen, Mancelona. Between cars examining coupling; carelessness.

December 30, Nye Nellis, laborer, Grand Rapids. Stepped from running engine, fell, struck head against tie; carelessness.

INJURED.

January 7, Willard Lewis, switchman, Grand Rapids. Coupling; flesh wound in arm.

January 20, Chas. Fletter, brakeman, Ross. Fell from caboose; carelessness.

February 20, Truman Odell, switchman, Kalamazoo. Coupling; injured in back.

April 16, C. A. Case, brakeman, Paris. Coupling, right hand mashed; accident.

April 24, W. L. Auman, engineer, near Stanwood. Collision; leg broken.

April 25, Damon sisters (2), Kalamazoo. Struck on crossing; own carelessness.

May 23, J. G. Shear, car repairer, Milton Junction. Working under car on siding without signal out; lost an arm.



May 29, Albert Zager, work train laborer, Whipples Siding. Accident; finger broken.

June 28, Frank Shultz, work train laborer, near Whipples Siding. Accident: leg and ankle jammed.

July 5, L. L. Chubb, switchman, Grand Rapids. Coupling, thumb crushed; accident.

July 29, Jos. Colier, switchman, Grand Rapids. Coupling, finger crushed; accident.

August 2, Wm. Russell, citizen, Grand Rapids. Passing under train on siding, lost an arm; carelessness.

August 7, Wm. Duck, brakeman, Mendon. Coupling, hand injured; carelessness.

August 15, J. Moll, brakeman, Kalamazoo. Coupling; carelessness.

August 31, Geo. Nichowitz, trespasser, Grand Rapids. Walking on track; leg broken.

September 13, A. A. Harris, section laborer, Mackinaw City. Hand car collided with train, leg fractured; lack of caution.

September 3, Mrs. W. F. Pratt, passenger, Elmira. Getting off train, fell, slightly injured; carelessness.

November 21, Harry Wright, boy, Pellston. Attempting to cross track; struck by passenger train and injured.

November 23, T. J. Bennett, brakeman, D. G. H. & M. Junction. unloading freight, right foot and ankle injured; accident.

November 25, Fred Brainard, brakeman, Mackinaw City. Coupling finger injured; accident.

October 3, Jas. Hall, car repairer, working under car without signal out; badly cut about legs.

December 3, J. Doyle, brakeman, Bradley. Coupling, fingers injured; carelessness.

December 10, Wm. Aylwood, switchman, Grand Rapids. Coupling, thumb taken off; accidental.

December 12, L. Ransom, switchman, Muskegon. Coupling, lost an arm; accident; joint employé with C. & W. M. railroad.

#### TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....					2	
Coupling cars.....					18	
Deraillments.....						
Falling from trains.....		1			1	
Frogs.....						
Getting on and off trains.....		1		1		
Highway crossings.....						3
Miscellaneous.....			1		8	1
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on track.....			8			1
Total.....		2	4	1	19	5

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year, - - -	6
Number of persons injured during the year, - - -	25
Number of casualties purely accidental, - - -	14
Number resulting from lack of caution, carelessness, or misconduct, - - -	13
Persons killed or injured while intoxicated, - - -	1
Trespassers and tramps killed or injured, - - -	3
Suicides, - - -	—

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....		7	7
Conductors.....	1		1
Engineers.....		1	1
Firemen.....			
Laborers.....		3	3
Shopmen.....	1		1
Yardmen.....		6	6
Not classified above.....		2	2
Total.....	2	19	21

STATE OF MICHIGAN, } ss.  
COUNTY OF KENT, }

W. O. Hughart, President, and F. A. Gorham, Auditor, of the Grand Rapids & Indiana Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ] Signed,

W. O. HUGHART.  
F. A. GORHAM.

Subscribed and sworn to before me this 10th day of May, A. D. 1890.

WM. S. HINARD, *Notary Public.*

ANNUAL REPORT  
OF THE  
MUSKEGON, GRAND RAPIDS & INDIANA RAILROAD  
COMPANY,

*For the Year Ending December 31, 1889.*

[Filed May 21, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, W. O. HUGHART, Grand Rapids, Mich.

*Treasurer*, W. R. SHELBY, Grand Rapids, Mich.

*Secretary and Transfer Agent*, J. H. P. HUGHART, Grand Rapids, Mich.

DIRECTORS.

W. O. HUGHART, Grand Rapids, Mich.

W. R. SHELBY, Grand Rapids, Mich.

J. M. METHEANY, Grand Rapids, Mich.

T. J. O'BRIEN, Grand Rapids, Mich.

J. H. P. HUGHART, Grand Rapids, Mich.

L. W. KEATING, Muskegon, Mich.

N. McGRAFT, Muskegon, Mich.

STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

When chartered or articles of association filed,—February 12, 1886.

Number of stockholders at date of last election,	- - - - -	7
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Number of stockholders in Michigan at same date,	- - - - -	7
--	-----------	---

Amount of full paid stock held in Michigan at same date,	- - - - -	\$1,000
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Fiscal year of company ends,—December 31.

General offices of the company are located at Grand Rapids, Michigan.

REMARKS.

Leased to Grand Rapids & Indiana Railroad Company for 99 years. Terms,—Net earnings guaranteed to be equal to interest on bonds.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association.	\$350,000 00
Par value of shares.	\$100
No. of shares issued.	None.
Amount paid in on shares not issued.	\$1,000 00
Total amount paid in as per books of the company.	\$1,000 00
Paid in per mile of road owned by company. —30.55 miles.	\$27 14

## ANALYSIS OF DEBT ACCOUNTS.

## FIXED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
*First mortgage, dated June 1, 1898.	7%	July 1, 1902.	New York.	\$250,000 00
Total funded debt.				\$250,000 00

\* These bonds are secured by the Grand Rapids & Indiana Railroad Company and are secured by a first mortgage on the railroad and property of the Michigan, Grand Rapids & Indiana Railroad Company.

## UNFUNDED DEBT.

For what Incurred.	Is the Same to be Paid, or How Liquidated.	Amount.
For construction.	To be paid.	\$20 25
For equipment.		
For fuel, water.		
For repairs.		
For stock interest.	Corporate tax January 1, 1898.—to be paid.	11.50 00
For current liabilities.		11.55 35
Total unfunded debt.		\$43.30 60

## RECAPITULATION.

Total funded debt.	\$250,000 00
Total unfunded debt.	\$43.30 60
Total debt liabilities.	\$293,300 60
Amount of debt liabilities per mile of road.—30.55 miles.	\$9,571 30
Total amount of stock and debt.	\$294,300 60
Stock and debt per mile of road.—30.55 miles.	\$9,637 14

## INTEREST ON THE FUNDED DEBT.

What is the amount due each year, - - - - - \$37,500 00  
 Was it paid for the last year? Yes.

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction, - - - - -	\$724,138 52
Average cost of construction per mile of road, not including sidings,—36.85 miles, - - - - -	19,650 98
Proportion of cost of construction for Michigan, - - - - -	724,138 52

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
 December 1, 1886.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan, - - - - -	36.85	
Total length completed, - - - - -		36.85
Total length of road belonging to this company, - - - - -	36.85	
Total length of road belonging to this company in Michigan, - - - - -		36.85
Aggregate length of sidings, spurs, and other tracks not above enumerated, - - - - -	8.46	
Same in Michigan, - - - - -		8.46
Aggregate length of tracks belonging to this company, computed as single track, - - - - -	45.31	
Same in Michigan, - - - - -		45.31

Gauge of track, 4 feet 9 inches.

STATE OF MICHIGAN, }  
 COUNTY OF KENT, } ss.

W. O. Hughart, President, of the Muskegon, Grand Rapids & Indiana Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full, and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

W. O. HUGHART.

Subscribed and sworn to before me this 12th day of May, A. D. 1890.

F. A. GORHAM, *Notary Public.*

STATE OF MICHIGAN, }  
COUNTY OF WAYNE, } ss.

John H. P. Hughart, Secretary, of the Muskegon, Grand Rapids, & Indiana Railroad Company, being duly sworn, deposes and says, that he caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

JOHN H. P. HUGHART.

Subscribed and sworn to before me this 14th day of May, A. D. 1889.

GEO. H. NADOLLECK, *Notary Public.*

ANNUAL REPORT  
OF THE  
TRAVERSE CITY RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed May 21, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, PERRY HANNAH, Traverse City, Mich.

*Secretary, Treasurer and Transfer Agent*, J. H. P. HUGHART, Grand Rapids, Mich.

DIRECTORS.

PERRY HANNAH, Traverse City, Mich.

SMITH BARNES, Traverse City, Mich.

W. H. C. MITCHELL, Traverse City, Mich.

THOS. T. BATES, Traverse City, Mich.

D. C. LEACH, Traverse City, Mich.

W. O. HUGHART, Grand Rapids, Mich.

W. R. SHELBY, Grand Rapids, Mich.

Terms expire May 8, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—October 30, 1871.

Number of stockholders at date of last election,	72
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Number of stockholders in Michigan at same date,	71
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Amount of full paid stock held in Michigan at same date,	\$35,400 00
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Date of annual meeting of stockholders,—Thursday after first Wednesday in May.

Fiscal year of company ends,—December 31.

General offices of this company are located at Traverse City, Mich.

REMARKS.

Leased to Grand Rapids & Indiana Railroad Company, for 50 years from January 1, 1883, rental, net earnings, guaranteed to be not less than interest on first mortgage bonds, or \$7,500 per year.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$205,000 00
Par value shares, -	\$100 00
Average price received per share, -	100 00
Number of shares issued, -	2,050
Amount paid in on common, -	\$205,000 00
Total amount paid in as per books of the company, -	205,000 00
Paid in per mile of road owned by company, miles,—26, -	\$7,884 62

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage, January 1, 1893.....	3%	January 1, 1903.....	New York...	\$250,000 00
Income, January 1, 1893.....	*½	January 1, 1903.....	New York...	190,000 00
Total funded debt.....				\$440,000 00

\* Not to exceed five per cent.

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For construction.....		
For equipment.....		
For real estate.....		
For renewals.....		
For miscellaneous.....	Coupons due January 1, 1890,—to be paid.....	\$3,750 00
For current balances.....		
Total unfunded debt.....		\$3,750 00

## RECAPITULATION.

Total funded debt, -	\$440,000 00
Total unfunded debt, -	3,750 00
Total debt liabilities, -	\$443,750 00
Amount of debt liabilities per mile of road,—26 miles, -	17,067 31
Total amount of stock and debt, -	648,750 00
Stock and debt per mile of road, -	24,951 93

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year, -	\$7,500 00
Was it paid for the last year? Yes.	



## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction, - - -	\$454,164 54
Average cost of construction per mile of road, not including sidings,—26 miles, - - -	17,467 84
Proportion of cost of construction for Michigan, - - -	454,164 54

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
December 1, 1872.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan, - - -	26.00	
Total length completed, - - -		26.00
Total length of road belonging to this company, -	26.00	
Total length of road belonging to this company in Michigan, -		26.00
Aggregate length in Michigan, of sidings, spurs, and other tracks not above enumerated, -	2.68	
Same in Michigan, -		2.68
Aggregate length of tracks in Michigan belong- ing to this company, computed as single track, -	28.68	
Same in Michigan, - - -		28.68

Gauge of track, 4 feet 9 inches.

STATE OF MICHIGAN, }  
COUNTY OF GRAND TRAVERSE, } ss.

Perry Hannah, President, of the Traverse City Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

PERRY HANNAH.

Subscribed and sworn to before me this 8th day of May, A. D. 1890.

GEO. W. HALL, *Notary Public*.

STATE OF MICHIGAN, {  
COUNTY OF WAYNE, } ss.

John H. Hughart, Secretary, of the Traverse City Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the stock, debt and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

[L. S. OF R. R.]                      Signed,                      JOHN H. P. HUGHART.  
Subscribed and sworn to before me this 14th day of May, A. D. 1890.

GEO. H. NADOLLECK, *Notary Public.*

ANNUAL REPORT  
OF THE  
CINCINNATI, JACKSON & MACKINAW RAILROAD COMPANY,

*For the period beginning January 1, and ending, November 7, 1889.*

[Filed May 21, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, WALSTON H. BROWN, New York.  
*Vice President* GEO. R. SHELDON, New York.  
*Secretary*, F. B. SWAYNE, Van Wert, Ohio.  
*Comptroller*, F. S. ANABLE, Toledo, Ohio.  
*Treasurer*, DENNISTORN WOOD, New York.  
*General Manager*, F. B. DRAKE, Toledo, Ohio.  
*Superintendent*, J. B. FLANDERS, Toledo, Ohio.  
*Division Superintendent*, W. T. BACKUS, Van Wert, Ohio.  
*Chief Engineer*, G. L. McKIBBEN, Van Wert, Ohio.  
*Cashier*, O. A. WILSON, Toledo, Ohio.  
*General Counsel*, SWAYNE, SWAYNE & HAYES, Toledo, Ohio.

DIRECTORS.

SAML. THOMAS, New York City, N. Y.  
GEO. R. SHELDON, New York City, N. Y.  
GEO. F. STONE, New York City, N. Y.  
WALSTON H. BROWN, New York City, N. Y.  
C. M. McGHU, New York City, N. Y.  
R. T. WILSON, New York City, N. Y.  
J. KENNEDY TOD, New York City, N. Y.  
JAY O. MOSS, New York City, N. Y.  
H. WALTERS, Baltimore, Md.  
DAN P. EELLS, Cleveland, Ohio.  
W. T. CARRINGTON, Toledo, Ohio.  
F. B. DRAKE, Toledo, Ohio.  
F. S. ANABLE, Toledo, Ohio.  
F. L. HAMMER, Van Wert, Ohio.  
OSCAR SHEPPARD, West Alexandria, Ohio.

Terms expire October 1, 1890.

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year, - - -	6
Number of persons injured during the year, - - -	25
Number of casualties purely accidental, - - -	14
Number resulting from lack of caution, carelessness, or misconduct, - - -	13
Persons killed or injured while intoxicated, - - -	1
Trespassers and tramps killed or injured, - - -	3
Suicides, - - -	—

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....		7	7
Conductors.....	1		1
Engineers.....		1	1
Firemen.....			
Laborers.....		3	3
Shopmen.....	1		1
Yardmen.....		6	6
Not classified above.....		2	2
Total.....	2	19	21

STATE OF MICHIGAN, }  
COUNTY OF KENT, } ss.

W. O. Hughart, President, and F. A. Gorham, Auditor, of the Grand Rapids & Indiana Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed,

W. O. HUGHART.  
F. A. GORHAM.

Subscribed and sworn to before me this 10th day of May, A. D. 1890.

WM. S. HINARD, *Notary Public.*

ANNUAL REPORT  
OF THE  
MUSKEGON, GRAND RAPIDS & INDIANA RAILROAD  
COMPANY,

*For the Year Ending December 31, 1889.*

[Filed May 21, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, W. O. HUGHART, Grand Rapids, Mich.

*Treasurer*, W. R. SHELBY, Grand Rapids, Mich.

*Secretary and Transfer Agent*, J. H. P. HUGHART, Grand Rapids, Mich.

DIRECTORS.

W. O. HUGHART, Grand Rapids, Mich.

W. R. SHELBY, Grand Rapids, Mich.

J. M. METHEANY, Grand Rapids, Mich.

T. J. O'BRIEN, Grand Rapids, Mich.

J. H. P. HUGHART, Grand Rapids, Mich.

L. W. KEATING, Muskegon, Mich.

N. McGRAFT, Muskegon, Mich.

STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

When chartered or articles of association filed,—February 12, 1886.

Number of stockholders at date of last election,	7
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Number of stockholders in Michigan at same date,	7
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Amount of full paid stock held in Michigan at same date,	\$1,000
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Fiscal year of company ends,—December 31.

General offices of the company are located at Grand Rapids, Michigan.

REMARKS.

Leased to Grand Rapids & Indiana Railroad Company for 99 years. Terms,—Net earnings guaranteed to be equal to interest on bonds.

## Cash items:

Cash, - - - - -	\$7,227 75	
Due from agents, - - - - -	28,498 14	
		<u>\$35,725 89</u>

## Other assets:

Materials and supplies, - - - - -	\$15,638 33	
Debit balances from companies and individuals, - - - - -	34,164 81	
		<u>49,803 14</u>
Income account, - - - - -		14,149 72

Total, - - - - -		<u>\$21,873,049 49</u>
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## GENERAL BALANCE SHEET.—Cr.

Capital stock, - - - - -	\$16,280,835 00	
Funded debt, - - - - -	3,629,000 00	
		<u>\$19,909,835 00</u>
Bonds and stocks in trust, - - - - -		1,505,500 00
Unfunded debt:		
Interest unpaid, including accrued to date, - - - - -	\$71,111 97	
Notes payable, - - - - -	230,784 25	
Vouchers and accounts, - - - - -	155,818 27	
		<u>457,714 49</u>
Total, - - - - -		<u>\$21,873,049 49</u>

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment, - - -	\$19,888,430 74
Average cost per mile of road not including sidings, —325.1 miles, - - - - -	61,176 35
Proportion of cost for Michigan, - - - - -	<u>9,493,345 99</u>

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings, - - - - -	\$26,576 95	
New buildings, - - - - -	6,248 55	
New fences, - - - - -	24,666 35	
Machinery and tools, - - - - -	486 36	
New cars, - - - - -	1,021 94	
		<u>\$59,000 15</u>
Total charges to property account as above, - - -		<u>\$59,000 15</u>
Net addition to property account, - - - - -		\$59,000 15

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

## Main line and branches:

Local fares, - - - - -	\$113,640 69	
Through fares, - - - - -	26,393 55	
Total passenger fares, - - - - -	<u>\$140,034 24</u>	
Express and baggage, - - - - -	29,506 08	
Mails, - - - - -	18,797 72	
Total passenger department earnings, - - - - -		\$188,338 04
Proportion for Michigan, - - - - -	\$93,180 77	
Per train mile, - - - - -	53	
Per mile of road, - - - - -	541 04	

## FREIGHT EARNINGS.

## Main line and branches:

Local traffic, - - - - -	\$248,898 13	
Through traffic, - - - - -	88,494 51	
Total traffic, - - - - -	<u>\$337,392 64</u>	
Total freight department earnings, - - - - -		\$337,392 64
Proportion for Michigan, - - - - -	\$166,927 00	
Per train mile, - - - - -	91	
Per mile of road, - - - - -	969 25	
Total transportation earnings, - - - - -		\$525,730 68
Transportation earnings per mile of road, - - - - -	\$1,510 29	
Transportation earnings per train mile, - - - - -	73	
From other sources, - - - - -		2,732 78
Total earnings from operation of road, - - - - -		<u>\$528,463 46</u>
Total earnings per mile of road, - - - - -	\$1,518 14	
Total earnings per train mile, - - - - -	73	
Proportion of taxable earnings for Michigan, - - - - -		\$261,460 42
Total taxable earnings per mile of road in Michigan,—172.18 miles, - - - - -	1,518 14	
Dividends on stock owned 1886, - - - - -		169 78
Total income from all sources, - - - - -		<u>\$528,633 24</u>
Proportion of income for Michigan, - - - - -		261,460 42

## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track.	\$63,663	33
Renewals of rails,	10	03
Renewals of ties,	17,279	29
Repairs of bridges, including culverts and cattle guards,	9,361	82
Repairs of fences, road crossings and signs,	2,768	03
Repairs of buildings,	4,885	78
Total,	\$97,968	28

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives,	\$27,490	33
Repairs of passenger cars,	9,687	69
Repairs of freight cars,	24,312	09
Total,	\$61,490	11

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives,	\$55,803	62
Water supply,	4,645	53
Oil and waste,	4,377	05
Locomotive service,	43,910	75
Passenger train service,	9,815	41
Passenger train supplies,	1,294	18
Mileage of passenger cars,	190	57
Freight train service,	23,594	82
Freight train supplies,	331	71
Mileage of freight cars,	5,402	82
Telegraph expenses (maintenance and operating),	15,110	60
Damage and loss of freight and baggage,	1,867	07
Damages to property and cattle,	3,959	32
Personal injuries,	1,742	76
Agents and station service,	31,651	76
Station supplies,	1,568	64
Total,	\$205,266	61

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company,	\$22,202	07
Salaries of clerks in general offices,	12,791	65
Law expenses,	7,527	31
Insurance,	1,621	20
Stationery and printing,	5,635	72
Outside agencies and advertising,	9,889	88
Contingencies,	6,558	44
Taxes,	27,053	29
Total,	\$93,279	56



## RECAPITULATION OF EXPENSES.

	Per cent of Expenses.	
Maintenance of way and buildings, - - -	21.39	\$97,968 28
Maintenance of motive power and cars, - - -	13.43	61,490 11
Conducting transportation, - - -	44.81	205,266 61
General expenses, including taxes, - - -	20.37	93,279 56
<hr/>		
Total operating expenses and taxes, - - -		\$458,004 56
Operating expenses and taxes per mile of road, 348.1 miles operated, - - -	\$1,315 72	
Operating expenses and taxes per train mile run, for trains earning revenue,—718,969 miles, - - -	63	
Proportion of operating expenses and taxes for Michigan:		
Main line, - - -	226,529 04	
Total proportion of expenses for Michigan, - - -		226,529 04
Percentage of expenses to earnings,—86.67%.		
Net earnings per mile of road, - - -	202 42	
Net earnings per train mile, - - -	10	

## DESCRIPTION OF ROAD.

For description of road see receiver's report.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year, - - -	328,704
Miles run by freight trains during the year, - - -	302,944
Miles run by mixed trains, - - -	87,321
<hr/>	
Total mileage of trains earning revenue, - - -	718,969

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried, - - -	31,795		
Number of local passengers carried, - - -	245,525		
<hr/>			
Total number of passengers carried, - - -	277,320		
Total passenger mileage, or passengers carried one mile, - - -		6,138,915	
Average distance traveled by each passenger, - - -		22.13	
Average amount received from each passenger, - - -		\$0 50.00	
Average rate of fare per mile for through passengers, - - -		01.98	
Average rate of fare per mile for local passengers, - - -		02.36	
Average rate of fare per mile for all passengers, - - -		02.26	

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	184,082		
Number of tons of local freight carried,	398,635		
Total tons of freight carried,	582,717		
Total mileage of through freight,		12,066,679	
Total mileage of local freight,		29,665,520	
Total freight mileage, or tons carried one mile,		41,732,199	
Average ton haul for through freight,			65.5
Average ton haul for local freight,			74.4
Average ton haul for all freight,			71.6
Average amount received for each ton haul,			\$0 58.00
Average rate per ton per mile received for through freight,			00.73
Average rate per ton per mile, received for local freight,			00.84
Average rate per ton per mile, received for all freight,			00.81

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	10,024
Flour,	2,191
Provisions (beef, pork, lard, etc.),	744
Animals,	3,082
Other agricultural products,	7,054
Lumber and forest products,	34,941
Coal,	437
Plaster, lime and cement,	455
Salt,	394
Petroleum,	158
Railroad iron, iron and steel rails,	554
Pig and bloom iron,	57
Other iron and castings,	322
Ores,	170
Stone, brick and sand,	4,867
Manufactures,—articles shipped from point of production,	1,587
Merchandise and other articles not enumerated above,	16,883
Total forwarded,	83,920

*Tonnage of Articles Transported—Entire Road.*

	Tons.	Per Cent.
Grain,	28,717	4.93
Flour,	4,128	.71
Provisions (beef, pork, lard, etc.),	1,587	.27
Animals,	8,465	1.45
Other agricultural products,	13,692	2.33
Lumber and forest products,	84,354	14.48

	Tons.	Per Cent.
Coal,	239,864	41.16
Plaster, lime and cement,	1,677	.29
Salt,	1,378	.24
Petroleum,	3,409	.59
Railroad iron, iron and steel rails,	752	.13
Pig and bloom iron,	30,850	5.30
Other iron and castings,	3,838	.66
Ores,	170	.03
Stone, brick and sand,	91,864	15.76
Manufactures,—articles shipped from point of production,	19,801	3.40
Merchandise and other articles not enumerated above,	48,171	8.27
Total tons carried,	582,717	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company; fixed sum per month; general express business; freight taken at depots.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

February 6, T. E. Spruner, car repairer, C. & St. L. railroad near Battle Creek. Trespasser on track with velocipede; company not responsible.

## INJURED.

January 10, J. Attig, engineer, Addison. Cars running out of siding and striking engine.

February 12, D. E. Austin, brakeman, Onsted. Coupling.

April 5, T. J. Tivnen, brakeman, Ria. Coupling.

April 23, S. F. Miller, foreman car department, Marshall. Coupling.

May 4, H. Wilberham, brakeman, Addison. Coupling.

May 14, Chas. Bierman, tramp, Onsted. Fell from train.

May 24, J. White brakeman, Addison. Slipped setting brakes.

May 28, G. A. Godfrey, engineer, Marshall. Getting off engine.

October 16, J. Carey, bridge carpenter, near Jerome. Fell from bridge.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employée.	Others.
Collisions.....						
Coupling cars.....					4	
Derailments.....						
Falling from trains.....						
Frogs.....						
Getting on and off trains.....					1	
Highway crossings.....						
Miscellaneous.....					3	
Overhead obstructions.....						
Trespassers on trains.....						1
Trespassers on tracks.....			1			
Total.....			1		8	1

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	1
Number of persons injured during the year,	9
Number of casualties purely accidental,	2
Number resulting from lack of caution, carelessness, or misconduct,	6
Persons killed or injured while intoxicated,	—
Trespassers and tramps killed or injured,	2
Suicides,	—

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....		4	4
Conductors.....		2	2
Engineers.....			
Firemen.....			
Laborers.....			
Shopmen.....		1	1
Yardmen.....			
Not classified above.....		1	1
Total.....		8	8

STATE OF OHIO, }  
COUNTY OF LUCAS, } ss.

F. B. Drake, General Manager, and F. S. Anable, Comptroller, of the Cincinnati, Jackson & Mackinaw Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full and correct statement of the condition and affairs of said company, on the seventh day of November, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

F. B. DRAKE.

F. S. ANABLE.

Subscribed and sworn to before me this 19th day of May, A. D. 1890.

B. A. HAYES, *Notary Public.*

ANNUAL REPORT  
OF THE  
CINCINNATI, JACKSON & MACKINAW RAILROAD COMPANY,  
WALSTON H. BROWN, RECEIVER.

*For the period beginning November 8, 1889.*

[Filed May 21, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*Comptroller*, F. S. ANABLE, Toledo, Ohio.  
*General Manager*, F. B. DRAKE, Toledo, Ohio.  
*Superintendent*, J. B. FLANDERS, Toledo, Ohio.  
*Division Superintendent*, W. T. BACKUS, Van Wert, Ohio.  
*Chief Engineer*, G. L. McKIBBEN, Van Wert, Ohio.  
*Cashier*, O. A. WILSON, Toledo, Ohio.  
*General Passenger Agent and Freight Agent*, T. C. M. SCHINDLER, Toledo, O.  
*General Counsel*, SWAYNE, SWAYNE & HAYES, Toledo, Ohio.  
*Receiver*, WALSTON H. BROWN, New York.

DIRECTORS.

[See company report.]

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—March 9, 1886.

Number of stockholders at date of last election, - - - - - 259

Number of stockholders in Michigan at same date, - - - - - 9

Amount of full paid stock held in Michigan at same date, - - - - - 170 shares.

Date of annual meeting of stockholders,—First Wednesday in October.

Fiscal year of company ends,—June 30.

General offices of the Receiver are located at Toledo, Ohio.

GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$94,974 98
Total expenses, including taxes, - - - - -	\$78,024 82	
Net income, - - - - -		\$16,950 16

Rentals of buildings, tracks, etc.,	\$2,721 45	
Balance for the year,		\$14,228 71
Balance forward to next year,	\$14,228 71	
	<u>\$14,228 71</u>	<u>\$14,228 71</u>

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt,	None.
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## UNFUNDED DEBT.

For current balances,	\$116,171 40
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## RECAPITULATION.

Total unfunded debt,	<u>\$116,171 40</u>
Total debt liabilities,	\$116,171 40
Amount of debt liabilities per mile of road,—325.1 miles,	357 34

## GENERAL BALANCE SHEET.—DR.

Improvement and equipment account,	\$682 04	
Other investments:		
C., J. & M. Co.,	14,708 97	
	<u></u>	\$15,391 01
Cash items:		
Cash,	\$23,898 50	
Due from agents,	33,286 48	
	<u></u>	57,184 98
Other assets:		
Materials and supplies,	\$13,493 31	
Debit balances from companies and individuals,	44,330 81	
	<u></u>	57,824 12
Total,		<u>\$130,400 11</u>

## GENERAL BALANCE SHEET.—CR.

Unfunded debt:		
Vouchers and accounts,	\$116,171 40	
	<u></u>	\$116,171 40
Profit and loss or income accounts,		14,228 71
Total,		<u>\$130,400 11</u>

## CHARGES AND CREDITS TO PROPERTY DURING THE RECEIVER PERIOD.

## MAIN LINE.

Extensions and new sidings, - - - - -	\$86 43
New buildings, - - - - -	137 76
Few fences, - - - - -	128 91
Machinery and tools, - - - - -	78 94
New cars, - - - - -	250 00

Total, - - - - -	<u>\$682 04</u>
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Total charges to property account as above, -	<u>\$682 04</u>
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Net addition to property account, - - - - -	682 04
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## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Local fares, - - - - -	\$19,418 21
Through fares, - - - - -	3,583 11
Total passenger fares, - - - - -	<u>\$23,001 32</u>
Express and baggage, - - - - -	5,090 88
Mails, - - - - -	3,144 00
Total passenger department earnings, - - - - -	<u>\$31,239 20</u>
Proportion for Michigan, - - - - -	\$15,455 78
Per train mile, - - - - -	67
Per mile of road, - - - - -	89 74

## FREIGHT EARNINGS.

Local traffic, - - - - -	\$42,021 22
Through traffic, - - - - -	21,654 35
Total traffic, - - - - -	<u>\$63,675 57</u>
Total freight department earnings, - - - - -	63,675 57
Proportion for Michigan, - - - - -	\$31,503 86
Per train mile, - - - - -	1 03
Per mile of road, - - - - -	182 92
Total transportation earnings, - - - - -	<u>\$94,914 77</u>
Transportation earnings per mile of road, -	\$272 66
Transportation earnings per train mile, -	87
From other sources, - - - - -	60 21
Total earnings from operation of road, - - - - -	<u>\$94,974 98</u>



Total earnings per mile of road, - - -	\$272 84
Total earnings per train mile, - - -	87
Proportion of taxable earnings for Michigan, - - -	46,989 44
Total taxable earnings per mile of road in Michigan, - - - - -	272 84
Total income from all sources, - - -	<hr/> \$94,974 98
Proportion of income for Michigan, - - -	46,989 44

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track, - - - - -	\$11,654 08
Renewals of ties, - - - - -	1,607 42
Repairs of bridges, including culverts and cattle guards, - - -	1,684 89
Repairs of fences, road crossings, and signs, - - -	579 17
Repairs of buildings, - - - - -	1,365 19
Total, - - - - -	<hr/> \$16,890 75

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives, - - - - -	\$5,446 21
Repairs of passenger cars, - - - - -	2,095 30
Repairs of freight cars, - - - - -	3,044 02
Total, - - - - -	<hr/> \$10,585 53

## CLASS 3.—Conducting Transportation.

Fuel for locomotives, - - - - -	\$10,125 43
Water supply, - - - - -	747 67
Oil and waste, - - - - -	869 86
Locomotive service, - - - - -	8,060 26
Passenger train service, - - - - -	1,638 79
Passenger train supplies, - - - - -	275 41
Freight train service, - - - - -	4,630 63
Freight train supplies, - - - - -	54 32
Mileage of freight cars, - - - - -	1,118 88
Telegraph expenses (maintenance and operating), - - -	2 526 73
Damages to property and cattle, - - - - -	20 50
Personal injuries, - - - - -	109 07
Agents and station service, - - - - -	5,411 61
Station supplies, - - - - -	385 57
Total, - - - - -	<hr/> \$35,974 73

## CLASS 4.—General Expenses.

Salaries of the general officers of the company, - - -	\$2,536 23
Salaries of clerks in general offices, - - -	2,360 20
Law expenses, - - - - -	725 83
Insurance, - - - - -	276 82

Stationery and printing, - - - - -	\$1,162 52
Outside agencies and advertising, - - - - -	1,029 57
Contingencies, - - - - -	1,352 29
Taxes, - - - - -	5,130 32
<b>Total, - - - - -</b>	<b>\$14,573 78</b>

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - -	21.65	\$16,890 75
Maintenance of motive power and cars, - - -	13.57	10,585 53
Conducting transportation, - - -	46.10	35,974 73
General expenses, including taxes, - - -	18.68	14,573 78
<b>Total operating expenses and taxes, - - -</b>		<b>\$78,024 79</b>
Operating expenses and taxes per mile of road, - - -	\$224 14	
Operating expenses and taxes per train mile run, for trains earning revenue,—108,517 miles, - - -	71	
Proportion of operating expenses and taxes for Michigan:		
Main line, - - - - -	38,591 07	
<b>Total proportion of expenses for Michigan, - - -</b>		<b>38,591 07</b>
Percentage of expenses to earnings,—82.15%.		
Net earnings per mile of road, - - - - -	48 70	
Net earnings per train mile, - - - - -	16	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

## MAIN LINE.

From Dundee, Mich., to Allegan, Mich., November 29, 1883.

From Addison Junction, Mich., to C., C., C. & St. L. Junction near Franklin, Ohio, July 10, 1889.

## BRANCHES.

From Lewisburg, Ohio, to Quarries, 1887.

From Germantown, Ohio, to Distillery, 1887.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Dundee to Allegan, - - -	133.00	
In Michigan, from Addison Junction to State line, - - -	22.18	
In Ohio, from State line to C., C., C. & St. L. Junction near Franklin, - - -	166.72	
<b>Total length completed, - - - - -</b>		<b>321.90</b>

## BRANCHES.

	Miles. 100ths.	Miles. 100ths.
Euphemia, from Lewisburg, Ohio, to Quarries, -	1.4	
Mud Lick, from Germantown, Ohio, to Distillery, -	1.8	
Total length of branches owned by company, -		3.20
Total length of road belonging to this company, -		325.10
Total length of road belonging to this company in Michigan, -	155.18	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated, -	14.76	
Aggregate length of tracks in Michigan belonging to this company, computed as single track, -		169.94

Gauge of track, 4 feet, 8½ inches.

*Proprietary or Leased Roads Operated by this Company.*

Name, description and length of each:

	Total Miles. In Michigan.	
Under trackage contract,—Wheeling & Lake Erie R. R.:		
Toledo, Ohio, to Manhattan Junction, Ohio, -	2.10	
Toledo, Ann Arbor & North Michigan R'y:		
Manhattan Junction, Ohio, to Dundee, Michigan, -	20.90	17.00
Total, - - - - -	23.00	17.00
Total miles operated by the company, - - -	348.10	172.18

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of -	1;	aggregate length, feet, -	144
Wooden trestles, number of, -	89;	aggregate length, feet, -	21,926
Total, - - - - -	90;	- - - - -	22,070

*Draw Bridges in Michigan.*

How many on your line? None.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State and at what locality?

Wabash Railroad at Britton.

Lake Shore & Michigan Southern Railroad at Tecumseh, Hanover, Homer, and Allegan.

Michigan Central Railroad at Homer.

Chicago & Grand Trunk Railroad at Battle Creek.

Chicago, Kalamazoo & Saginaw Railroad at Kalamazoo Junction near Richland.

Grand Rapids & Indiana Railroad at Monteith.

Battle Creek & Sturgis Railroad at Battle Creek.

What railroads cross your road either over or under your grade in this State, and where?

Over,—

Lake Shore & Michigan Southern Railroad at Jerome and Hudson.

Under,—

Michigan Central Railroad at Augusta.

At what crossings are interlocking and derailing switches in operation?

Chicago, Kalamazoo & Saginaw Railway, Kalamazoo Junction.

Battle Creek & Sturgis Railway, Battle Creek.

Number of crossings of highways at grade in this State, 187

Number of crossings of highways at grade in this State at which there are gates or flagmen, 1

Number of crossings of highways over or under railroad, Over,—1, under,—5, 6

Number of highway bridges 18 feet above track, 1

Have safety guards been erected at over-head obstructions, Yes.

Are your frogs and guard rails blocked as required by act 174, session laws of 1883, Yes.

How are they treated? Wooden blocks.

#### *Stations.*

Number of stations on whole line, 83

Same in Michigan, 36

#### *Employés.*

Number persons regularly employed on all roads operated by company, including officials, 629

Same in Michigan, 233

Classify your employés as per following list:

	Number.
Baggagemen, - - - - -	8
Brakemen, - - - - -	35
Conductors, - - - - -	22
Engineers, - - - - -	31
Firemen, - - - - -	33
Laborers, - - - - -	277
Shopmen, - - - - -	81
Yardmen, - - - - -	14
Others, - - - - -	128

#### REPAIRS AND RENEWALS.

##### *Fencing in Michigan.*

How many miles of fencing have you? 295

Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:

In Lenawee county, miles, 11.11

*Road Bed and Track.*

Number of track sections in Michigan, - - - -		22
Average length of sections,—miles, - - - -	7.05	
Average number of men in each section gang, - - -		4
Number of new ties put in whole line during the year, -		42,399
Number of new ties put in track in Michigan, - - -		28,386
Average number of new ties per mile of road, in Mich., -		213

*Bridges and Culverts.*

Amount of trestle work replaced with earth during the year,		
—linear feet, - - - -		465
Timber culverts replaced during the year, - - - -		5
With timber,—number, - - - -	5	
New bridges built during the year, - - - -		None.

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - -	23	\$69,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - -	2	3,000 00
Total, - - - -	25	\$72,000 00
Number of passenger cars—8 wheel, including official cars, - - - -	20	38,400 00
Number of express and baggage cars, - - - -	3	3,600 00
Number of box freight cars, - - - -	593	118,600 00
Number of stock cars, - - - -	19	2,850 00
Number of platform cars, - - - -	303	37,875 00
Number of coal cars, - - - -	120	18,000 00
Number of conductors' way cars, - - - -	8	3,200 00
Total, - - - -	1,066	\$294,525 00

Number of locomotives equipped with power brakes, - - - -	5	
Number of passenger-train cars equipped with power brakes, - - - -	23	
Number of freight cars equipped with power brakes, - - - -		None.
What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse automatic air brake, 3 locomotives and 23 cars; Eames vacuum, 1 locomotive; American steam, 1 locomotive. Are your freight cars being equipped with automatic couplers as required by Act. No. 147, Session Laws of 1885? None built or rebuilt.		
What pattern or patterns have you adopted for use? None.		
How are your passenger cars heated? Baker heater.		

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year,	-	-	42,664
Miles run by freight trains during the year,	-	-	49,921
Miles run by mixed trains,	-	-	15,932
Total mileage of trains earning revenue,	-	-	108,517

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried,	2,586		
Number of local passengers carried,	45,582		
Total number of passengers carried,	48,168		

Total passenger mileage, or passengers carried one mile,	891,241		
Average distance traveled by each passenger,	-	-	18.50
Average amount received from each passenger,	-	-	\$0 47.000
Average rate of fare per mile for through passengers,	-	-	02.670
Average rate of fare per mile for local passengers,	-	-	02.570
Average rate of fare per mile for all passengers,	-	-	02.580

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	48,496		
Number of tons of local freight carried,	60,137		
Total tons of freight carried,	108,633		

Total mileage of through freight,	-	-	3,173,720
Total mileage of local freight,	-	-	5,260,833

Total freight mileage, or tons carried one mile, 8,434,553

Average ton haul for through freight,	-	-	65.4
Average ton haul for local freight,	-	-	87.4
Average ton haul for all freight,	-	-	77.6
Average amount received for each ton haul,	-	-	\$0 58.000
Average rate per ton per mile, received for through freight,	-	-	00.680
Average rate per ton per mile, received for local freight,	-	-	00.790
Average rate per ton per mile, received for all freight,	-	-	00.750

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	2,981
Flour,	366
Provisions (beef, pork, lard, etc.),	142
Animals,	1,193
Other agricultural products,	1,615
Lumber and forest products,	5,132
Coal,	149

	Tons.
Plaster, lime and cement, - - - - -	18
Salt, - - - - -	141
Petroleum, - - - - -	35
Railroad iron, iron and steel rails, - - - - -	28
Other iron and castings, - - - - -	65
Stone, brick and sand, - - - - -	680
Manufactures,—articles shipped from point of production, - - - - -	17
Merchandise and other articles not enumerated above, - - - - -	1,599
<b>Total forwarded, - - - - -</b>	<b>14,161</b>

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	5,312	4.97
Flour, - - - - -	652	.60
Provisions (beef, pork, lard, etc.), - - - - -	319	.29
Animals, - - - - -	3,036	2.79
Other agricultural products, - - - - -	4,155	3.82
Lumber and forest products, - - - - -	13,317	12.26
Coal, - - - - -	60,659	55.83
Plaster, lime and cement, - - - - -	209	.19
Salt, - - - - -	413	.38
Petroleum, - - - - -	1,102	1.01
Railroad iron, iron and steel rails, - - - - -	55	.04
Pig and bloom iron, - - - - -	9,649	8.88
Other iron and castings, - - - - -	1,434	1.32
Stone, brick and sand, - - - - -	2,441	2.21
Manufactures,—articles shipped from point of production, - - - - -	65	.06
Merchandise and other articles not enumerated above, - - - - -	5,815	5.35
<b>Total tons carried, - - - - -</b>	<b>108,633</b>	<b>100.00</b>

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company; fixed sum per menth; general express business; freight taken at depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

156 miles; Western Union Telegraph Company.

190 miles; Edison Mutual Telegraph Company.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING RECEIVER'S PERIOD.

## KILLED.

December 3, T. J. Edwards, citizen, Marshall. Crossing track in front of passenger train; company not responsible.

December 8, Robert Dunning, Fisk. Walking on track, deaf mute; company not responsible.

## INJURED.

November 27, Ed. Welch, brakeman, C. & St. L. Junction. Coupling; carelessness.

December 5, Geo. Goodman, fireman, Addison. Train started and pushed engine over him while cleaning fire-box; accidental.

December 29, Wm. Crider, conductor, Hudson. Stepping off engine; carelessness.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....					1	
Deraillments.....						
Falling from trains.....						
Frogs.....						
Getting on and off trains.....					1	
Highway crossings.....						
Miscellaneous.....					1	
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on tracks.....			2			
Total.....			2		3	

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the receiver's period,	2
Number of persons injured during the receiver's period,	13
Number of casualties purely accidental,	1
Number resulting from lack of caution, carelessness, or misconduct,	4
Persons killed or injured while intoxicated,	—
Trespassers and tramps killed or injured,	2
Suicides,	—



## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

Employés.	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....		1	1
Conductors.....		1	1
Engineers.....			
Firemen.....		1	1
Laborers.....			
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....		3	3

STATE OF OHIO, }  
COUNTY OF LUCAS, } ss.

F. B. Drake, General Manager, and F. S. Anable, Comptroller, of the Cincinnati, Jackson & Mackinaw Railroad Company, Walston H. Brown, Receiver, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

Signed,

[ L. S. OF R. R. ]

F. B. DRAKE.

F. S. ANABLE.

Subscribed and sworn to before me this 19th day of May, A. D. 1890.

B. A. HAYES, *Notary Public.*

ANNUAL REPORT  
OF THE  
CHICAGO & WEST MICHIGAN RAILWAY COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed May 21, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, NATHANIEL THAYER, Boston, Mass.  
*Vice President and General Manager*, J. B. MULLIKEN, Muskegon, Mich.  
*Secretary and Treasurer*, CHARLES MERRIAM, Boston, Mass.  
*Auditor*, U. B. ROGERS, Grand Rapids, Mich.  
*General Superintendent*, J. K. V. AGNEW, Grand Rapids, Mich.  
*Assistant Superintendent*, P. CONLEY, Holland, Mich.  
*Chief Engineer*, J. J. McVEAN, Grand Rapids, Mich.  
*Superintendent of Telegraph*, F. O. NYE, Holland, Mich.  
*Assistant Treasurer*, J. E. HOWARD, Grand Rapids, Mich.  
*General Passenger and Ticket Agent*, J. F. REEKIE, Detroit, Mich.  
*Traffic Manager*, W. A. CARPENTER, Muskegon, Mich.

DIRECTORS.

H. H. HUNNEWELL, Boston, Mass.  
C. F. ADAMS, Boston, Mass.  
G. O. SHATTUCK, Boston, Mass.  
CHAS. MERRIAM, Boston, Mass.  
N. THAYER, Boston, Mass.  
J. H. BLAKE, Boston, Mass.  
E. V. R. THAYER, Boston, Mass.  
A. H. HARDY, Boston, Mass.  
J. B. MULLIKEN, Muskegon, Mich.

Terms expire April 17, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—October 1, 1881.

Number of stockholders at date of last election, - - - - - 603

Number of stockholders in Michigan at same date, - - - - - 6

Amount of full paid stock held in Michigan at same date, - - - - - \$9,600

Date of annual meeting of stockholders,—Third Wednesday in April.

Fiscal year of company ends,—December 31.

General offices of the company are located at Boston, Mass., Grand Rapids, and Muskegon, Mich.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$1,374,833 30
Total expenses, including taxes, - - -	\$1,018,465 79	
Net income, - - - - -		\$356,367 51
Interest on funded debt, - - - - -	\$237,846 60	
Balance applicable to dividends, - - -		\$118,520 91
Dividends declared, 2%, - - - - -	\$123,004 00	
Balance for the year, - - - - -	\$4,483 09	
Balance (profit and loss) last year, - - -		\$234,026 08
Items not included in above, as follows:		
Miscellaneous interest, - - - - -		6,945 61
Balance forward to next year, - - - - -	\$236,488 60	
	\$240,971 69	\$240,971 69

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$6,800,000 00
Par value of shares, - - - - - \$100 00	
No. of shares issued, - - - - - 67,332	
Amount paid in on common, - - - - -	\$6,733,200 00
Amount paid in on shares not issued, - - - - -	63,600 00
Total amount paid in, as per books of the company, -	6,796,800 00
Paid in per mile of road owned by company,	
-408.40 miles, - - - - -	\$16,642 51

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
C. & M. L. S. R. R. Co., 1st mortgage bonds on 126.9 miles of road—New Buffalo to Muskegon—dated September 1, 1889.....	8%	September 1, 1889.....	New York.....	Void.
G. R., N. & L. S. R. R. Co., 1st mortgage bonds on 36 miles of road—Grand Rapids to Newaygo—dated July 1, 1891.....	8%	July 1, 1891.....	New York.....	\$576,000 00
G. R., N. & L. S. R. R. Co., second division, 1st mortgage bonds on 10 miles of road—Newaygo to White Cloud—dated June 1, 1895.....	7%	June 1, 1905.....	New York.....	24,000 00
C. & W. M. R'y Co., mortgage on 408.4 of consolidated line, subject to the above mortgages, dated December 1, 1881.....	5%	December 1, 1921.....	Boston.....	3,646,000 00
Total funded debt.....				\$4,246,000 00

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For construction.....	To be paid from earnings and sale of bonds.....	\$1,194,009 28
For equipment.....		
For real estate.....		
For renewals.....		
For miscellaneous.....		
For current balances.....		
Total unfunded debt.....		\$1,194,009 28

## RECAPITULATION.

Total funded debt,	- - - - -	\$4,246,000 00
Total unfunded debt,	- - - - -	1,194,009 28
Total debt liabilities,	- - - - -	\$5,440,009 28
Amount of debt liabilities per mile of road,—408.40 miles,		13,320 30
Total amount of stock and debt,	- - - - -	\$12,236,809 28
Stock and debt per mile of road,—408.40 miles,	- - - - -	29,962 81

## GENERAL BALANCE SHEET.—DR.

Construction account,	- - - - -	\$9,266,307 69
Equipment account,	- - - - -	1,136,499 53
		<u>\$10,402,807 22</u>
Other investments:		
C. & W. M. R'y Co. stock,	- - - - -	\$583,021 30
Muskegon Lake R. R. Co. stock,	- - - - -	33,600 00
Muskegon Car Co.	- - - - -	15,904 98
West Michigan Park Association bonds,	- - - - -	6,000 00
		<u>638,526 28</u>
Cash items:		
Cash,	- - - - -	\$32,170 03
Bills receivable,	- - - - -	10,000 00
Due from agents,	- - - - -	17,535 58
		<u>59,705 61</u>
Other assets:		
Materials and supplies,	- - - - -	\$45,093 66
Debit balances from companies and individuals,	- - - - -	816,350 11
Subscribers to blocks,	- - - - -	510,815 00
		<u>1,372,258 77</u>
Total,	- - - - -	\$12,473,297 88

## GENERAL BALANCE SHEET.—Cr.

Capital stock, - - - - -	\$6,796,800 00	
Funded debt, - - - - -	4,246,000 00	
		\$11,042,800 00
Unfunded debt:		
Interest unpaid, - - - - -	\$44,766 67	
Notes payable, - - - - -	91,000 00	
Vouchers and accounts, - - - - -	184,099 99	
Other liabilities:		
Advance payments of subscriptions, - - - - -	16,625 00	
Receipts for blocks, - - - - -	824,600 00	
Net traffic balances due other companies, - - - - -	31,522 01	
Miscellaneous, - - - - -	395 61	
C. & M. L. S. R. R. 8 % bond due, not presented, - - - - -	1,000 00	
		1,194,009 28
Profit and loss or income accounts, - - - - -		236,488 60
Total, - - - - -		\$12,473,297 88

*Purchased by Present Company.*

When purchased,—October 1, 1881.

Original cost to present company, of road and equipment,	\$8,578,430 84
Amount expended since purchase, account of construction,	1,228,864 61
Amount expended since purchase, account of equipment, -	595,511 77

Total cost to date of report, - - - - -	\$10,402,807 22
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Average cost per mile of road, not including sidings,—408.4 miles, - - - - -	25,472 10
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Proportion of cost for Michigan, - - - - -	9,525,038 52
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## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

New bridges, - - - - -	\$23,968 13	
Retiring bonds, - - - - -	23,509 75	
Right of way, - - - - -	50 00	
Total, - - - - -		\$47,527 88
Total charges to property account as above,	\$47,527 88	
Property sold and credited, - - - - -	8,521 64	
Net addition to property account, - - - - -		39,006 24

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

## Main line and branches:

Local fares, - - - - -	\$487,980 93
Through fares, - - - - -	7,452 41
Total passenger fares, - - - - -	<u>\$495,433 34</u>
Express and baggage, - - - - -	19,505 94
Mails, - - - - -	39,994 15
Other sources, - - - - -	1,200 00

Total passenger department earnings, - - - - -	\$556,133 43
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Proportion for Michigan, - - - - -	\$509,207 97
Per train mile, - - - - -	83
Per mile of road, - - - - -	1,361 74

## FREIGHT EARNINGS.

## Main line and branches:

Local traffic, - - - - -	\$806,786 07
Through traffic, - - - - -	11,779 09
Total traffic, - - - - -	<u>\$818,565 16</u>

Other sources, - - - - -	134 71
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Total freight department earnings, - - - - -	818,699 87
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Proportion for Michigan, - - - - -	\$749,619 56
Per train mile, - - - - -	1 63
Per mile of road, - - - - -	2,004 65

Total transportation earnings, - - - - -	<u>\$1,374,833 30</u>
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Transportation earnings per mile of road, - - - - -	\$3,363 45
Transportation earnings per train mile, - - - - -	1 17

Miscellaneous receipts from operating account, other than for transportation, as follows:

Miscellaneous earnings, - - - - -	1,200 00
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Total earnings from operation of road, - - - - -	<u>\$1,376,033 30</u>
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Total earnings per mile of road, - - - - -	\$3,366 39
Total earnings per train mile, - - - - -	1 17
Proportion of taxable earnings for Michigan, - - - - -	1,259,926 28
Total taxable earnings per mile of road in Michigan, - - - - -	3,366 39

Income other than from earnings, - - - - -	6,945 61
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Total income from all sources, - - - - -	<u>\$1,381,778 91</u>
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Proportion of income for Michigan, - - - - -	1,265,187 09
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## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track,	\$132,618	55
Renewals of rails,	3,087	75
Renewals of ties,	55,747	73
Repairs of bridges, including culverts and cattle guards,	37,634	41
Repairs of fences, road crossings, and signs,	22,649	13
Repairs of buildings,	20,035	39
Total,	\$271,772	96

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives,	\$63,733	49
Repairs of passenger cars,	42,533	30
Repairs of freight cars,	94,568	23
Total,	\$200,835	02

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives,	\$107,602	51
Water supply,	7,202	04
Oil and waste,	8,259	12
Locomotive service,	99,903	24
Passenger train service,	30,433	70
Passenger train supplies,	2,379	78
Mileage of passenger cars,	2,417	20
Freight train service,	40,702	26
Freight train supplies,	515	10
Mileage of freight cars,	1,887	81
Telegraph expenses (maintenance and operating),	26,003	55
Damage and loss of freight and baggage,	717	61
Damages to property and cattle,	2,003	13
Personal injuries,	4,190	20
Agents and station service,	101,010	49
Station supplies,	5,319	03
Total,	\$436,771	15

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company,	\$28,912	66
Salaries of clerks in general offices,	28,712	01
Law expenses,	5,598	41
Insurance,	4,183	82
Stationery and printing,	12,597	59
Outside agencies and advertising,	7,308	87
Contingencies,	7,277	71
Taxes,	29,051	01
Total,	\$109,086	66

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - -	26.68	\$271,772 96
Maintenance of motive power and cars, - - -	19.72	200,835 02
Conducting transportation, - - -	42.89	436,771 15
General expenses, including taxes, - - -	10.71	109,086 66
Total operating expenses and taxes, - - -	100.00	\$1,018,465 79
Operating expenses and taxes per mile of road,	\$2,493 79	
Operating expenses and taxes per train mile run, for trains earning revenue,—1,170,011 miles,	87	
Proportion of operating expenses and taxes for Michigan:		
Main line, - - - - -	932,529 62	
Total proportion of expenses for Michigan,	- -	932,529 62
Percentage of expenses to earnings,—74.08%.		
Net earnings per mile of road, - - -	872 59	
Net earnings per train mile, - - -	30	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

## MAIN LINE.

From Grand Rapids, Mich., to LaCrosse, Indiana, December 3, 1883.

## BRANCHES.

From Holland to Pentwater, January 1, 1872.

From Allegan to Muskegon, July 1, 1870.

From Grand Rapids to White Cloud, September 24, 1875.

From Muskegon to Grand Rapids, July 21, 1873.

From Mears to Hart, July 1, 1880.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Indiana State line to Pentwater, -	174.28	
In Indiana, from Michigan State line to LaCrosse, -	34.46	
Total length completed, - - - - -		208.74

## BRANCHES.

From Holland to White Cloud, - - - - -	70.00
From Holland to Allegan, - - - - -	23.00
From Fruitport to Muskegon, - - - - -	10.00
From Kirk's Junction to Pickands, - - - - -	3.50
From Muskegon to Port Sherman, - - - - -	6.00



	Miles. 100th s.	Miles. 100ths
From Big Rapids Junction to Big Rapids, . . . . .	51.63	
From Mears to Hart, . . . . .	3.30	
From White Cloud to West Troy, . . . . .	17.86	
From West Troy Junction to Baldwin, . . . . .	12.00	
From Lilley Junction to Sissons, . . . . .	2.37	
Total length of branches owned by company, . . . . .		199.66
Total length of branches owned by company in Michigan, . . . . .	199.66	
Total length of road belonging to this company, . . . . .		408.40
Total length of road belonging to this company in Michigan, . . . . .	373.94	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated, . . . . .	112.11	
Aggregate length of tracks in Michigan belonging to this company computed as single track, . . . . .		486.05
Gauge of track, 4 feet 8½ inches.		
Total miles operated by the company, . . . . .	Total Miles. In Michigan. 408.40	373.94

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of . . . . .	5; aggregate length, feet, . . . . .	1,505
Stone bridges, number of . . . . .	1; aggregate length feet, . . . . .	1,026
Combination bridges, number of . . . . .	2; aggregate length, feet, . . . . .	675
Wooden trestles, number of . . . . .	202; aggregate length, feet, . . . . .	25,534
Total, . . . . .	210; . . . . .	28,740

*Draw Bridges in Michigan.*

How many on your line? . . . . . 5  
Where located, when built and length of draw span.

- 1, St. Joseph, built in 1889; 237 feet.
- 2, Grand Rapids, built in 1882; 162 feet.
- 3, New Richmond, built in 1882; 60 feet.
- 4, Muskegon, built in 1887; 40 feet.
- 5, Montague, built in 1889; 40 feet.

Character of structure:

Numbers 1 and 2 double end swing, numbers 3, 4 and 5 jack-knife draw

Material of which constructed:

Number 1 iron, number 2 wood, 3, 4 and 5 timber.

Height above water, and depth of water under bridge:

1, 18 feet; 2, 12 feet; 3, 13 feet; 4, 7 feet; 5, 9 feet.

How swung, by engine or hand power?

Hand power.

Approaches straight or curved?

Numbers 1, 2 and 3, curves; number 4 and 5, straight.

Do you require all trains to come to full stop before crossing a draw, and how are they signaled?

Yes, and flagged by watchmen.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Grand Rapids & Indiana Railroad at and near Grand Rapids.

Detroit, Grand Haven & Milwaukee Railroad at and near Grand Rapids.

Lake Shore & Michigan Southern Railroad near Grandville.

Toledo, Saginaw & Muskegon Railroad at Sparta.

Muskegon, Grand Rapids & Indiana Railroad near Muskegon, twice.

Toledo, Saginaw & Muskegon Railroad near Muskegon.

Toledo & South Haven Railroad at Hartford.

Michigan Central Railroad at Grand Junction.

What railroads cross your road either over or under your grade in this State, and where?

Under,—

Michigan Central Railroad 1½ miles south of New Buffalo.

At what crossings are interlocking and derailing switches in operation?

Flint & Pere Marquette Railroad at Baldwin.

Toledo & South Haven Railroad at Hartford.

Toledo, Saginaw & Muskegon Railway at Sparta.

Toledo, Saginaw & Muskegon Railway at Muskegon.

What pattern or patterns have you adopted? Gravitt.

Number of crossings of highways at grade in this State, 485

Number of crossings of highways at grade in this State  
at which there are gates or flagmen, 24

Number of crossings at which there are electric or auto-  
matic signals, 4

What pattern or patterns in use? Mills & McDonald Pneumatic.

Number of crossings of highways over or under railroad:

Over,—9. Under,—11, 20

Number of highway bridges 18 feet above track, 8

Number of highway bridges less than 18 feet above track, None.

Have safety guards been erected at over-head obstructions, Yes.

Are your frogs and guard rails blocked as required by act  
174, session laws 1883? Yes.

How are they treated? General inspection every month.

*Stations.*

Number of stations on whole line, 109

Same in Michigan, 103

*Employés.*

Number of persons regularly employed on all roads  
operated by company, including officials, 1,229

Same in Michigan, 1,188

Classify your employés as per following list:

	Number.
Baggagemen, - - - - -	34
Brakemen, - - - - -	77
Conductors, - - - - -	42
Engineers, - - - - -	56
Firemen, - - - - -	59
Laborers, - - - - -	384
Shopmen, - - - - -	238
Yardmen, - - - - -	35
Others, - - - - -	304

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - - 782

Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed:

Lake and Oceana counties, - - - - - 44

Total miles required, - - - - - 44

*Road Bed and Track.*

Number of track sections in Michigan, - - - - - 73

Average length of sections,—miles, - - - - - 5.5

Average number of men in each section gang, - - - - - 3

Number of new ties put in whole line during the year, - - - - - 202,107

Number of new ties put in track in Michigan, - - - - - 188,500

Average number of new ties per mile of road, - - - - - 495

New rails put in track:

Steel (tons, 2,000) miles,—212.

Total miles of track laid with new rails, - - - - - 212

*Bridges and Culverts.*

Amount of trestle work replaced with earth during the year, —linear feet, - - - - - 2,365

New bridges built during the year,—number, - - - - - 7

With sewer pipe,—number, - - - - - 7

New bridges built during the year, - - - - - 13

Location.	Kind.	Material.	Month Built.	Feet in Length.
St. Joseph.....	Pile.....	Pine.....	Aug. & Sept....	766
Benton Harbor.....	Pile.....	Pine.....	July.....	161
Benton Harbor.....	Pile.....	Pine.....	July.....	64
Holland.....	Pile.....	Pine.....	July.....	370
Grandville.....	Pile.....	Pine.....	July.....	18
Muskegon.....	Pile.....	Pine.....	August.....	45
Muskegon.....	Pile.....	Pine.....	April.....	218
Whitehall.....	Pile.....	Pine.....	September.....	316
Whitehall.....	Pile.....	Pine.....	Aug. & Sept....	267
Shelby.....	Pile.....	Pine.....	October.....	17
Mona Lake.....	Pile.....	Pine.....	December.....	105
Newaygo.....	Pile.....	Pine.....	December.....	20
Montague.....	Draw truss.....	Pine.....		72
Total.....				2,487

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	35	\$105,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	12	30,000 00
Number of locomotives of 10 to 20 tons weight, exclusive of tender, - - - - -	2	2,000 00
Total, - - - - -	49	\$137,000 00
Number of passenger cars—8-wheel, including official cars, - - - - -	39	78,000 00
Number of express and baggage cars, - - - - -	22	22,000 00
Number of box freight cars, - - - - -	824	185,400 00
Number of stock cars, - - - - -	5	1,000 00
Number of platform cars, - - - - -	1,005	150,750 00
Number of conductors' way cars, - - - - -	21	4,200 00
Other cars, - - - - -	217	51,150 00
Log cars, 6; tool cars, 2; pile driver, 1; snow plows, 4; excavators, 2; painters' car, 1; carpenters' car, 1; *W. M. E. & L. L., 200.		
Total, - - - - -	2,133	\$629,500 00

Number of locomotives equipped with power brakes, - - - - -	45
Number of passenger-train cars equipped with power brakes, - - - - -	61
Number of freight cars equipped with power brakes, - - - - -	None.

What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse automatic air brake locomotives 25, cars 61; American steam brake locomotives 20.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? No.

How are your passenger cars heated? By steam from locomotive.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year, - - -	669,103
Miles run by freight trains during the year, - - -	500,908
Total mileage of trains earning revenue, - - -	1,170,011

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Number of through passengers carried, - - -	4,462		
Number of local passengers carried, - - -	674,608		
Total number of passengers carried, - - -	679,070		

\* These West Michigan Equipment Co. & Lumber Line cars are operated by the C. & W. M. R'y Co. under a lease.

	Miles.	Rate. Dollars. Cents.
Total passenger mileage, or passengers carried one mile,	22,849,720	
Average distance traveled by each passenger,	35.55	
Average amount received from each passenger,	-	\$0 73.00
Average rate of fare per mile for through passengers,	-	01.38
Average rate of fare per mile for local passengers,	-	02.99
Average rate of fare per mile for all passengers,	-	02.18

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	9,184		
Number of tons of local freight carried,	874,708		
Total tons of freight carried,	883,892		
Total mileage of through freight,	-	1,274,455	
Total mileage of local freight,	-	57,166,582	
Total freight mileage, or tons carried one mile,	-	58,441,037	
Average ton haul for through freight,	-	139	
Average ton haul for local freight,	-	65	
Average ton haul for all freight,	-	66	
Average amount received for each ton haul,	-	\$0 92.630	
Average rate per ton per mile, received for through freight,	-	00.924	
Average rate per ton per mile, received for local freight,	-	01.586	
Average rate per ton per mile, received for all freight,	-	01.406	

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	15,238
Flour,	9,231
Provisions (beef, pork, lard, etc.),	2,584
Animals,	3,723
Other agricultural products,	36,042
Lumber and forest products,	541,366
Coal,	27,984
Plaster, lime and cement,	22,289
Salt,	1,732
Petroleum,	3,058
Railroad iron, iron and steel rails,	11,117
Pig and bloom iron,	16,870
Other iron and castings,	8,879
Stone, brick and sand,	27,581
Manufactures,—articles shipped from point of production,	21,169
Merchandise and other articles not enumerated above,	61,210
Total forwarded,	810,073

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	21,061	2.38
Flour, - - - - -	9,794	1.11
Provisions (beef, pork, lard, etc.), - - - - -	2,605	.29
Animals, - - - - -	3,809	.43
Other agricultural products, - - - - -	36,849	4.17
Lumber and forest products, - - - - -	543,705	61.51
Coal, - - - - -	65,548	7.42
Plaster, lime and cement, - - - - -	22,981	2.60
Salt, - - - - -	1,823	.21
Petroleum, - - - - -	3,766	.43
Railroad iron, iron and steel rails, - - - - -	12,030	1.36
Pig and bloom iron, - - - - -	17,298	1.96
Other iron and castings, - - - - -	10,951	1.24
Stone, brick and sand, - - - - -	27,996	3.16
Manufactures,—articles shipped from point of production, - - - - -	21,862	2.47
Merchandise and other articles not enumerated above, - - - - -	81,814	9.26
Total tons carried, - - - - -	883,892	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company pays seven cents per ton per mile for all freight it carries over the line, except for small fruits, which are carried at an agreed rate. The messengers are carried free. It does a general express business and takes its own freight at the railway company's depot.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

676 to the Western Union Telegraph Company.

*Transportation Companies.*

## SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Wagner Sleeping Car Co., New York, N. Y., - - - \$3,933 10

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

American Refrigerator Transit Co., St. Louis, Mo.,	\$27 50
Armour Refrigerator Line, Chicago, Ill.,	7 34
Arms Palace Horse Car Co., Chicago, Ill.,	5 00
Atlanta, Stone, Coal & Lumber Co., Atlanta, Ga.,	1 94
Blue Line, Rochester, N. Y.,	2,829 31
Barrett & Barrett, Chicago, Ill.,	3 54
Canada Southern Line, Rochester, N. Y.,	647 32
Cupples, Sam, Wooden Ware Co., Grand Rapids, Mich.,	42 86
Columbus & Hocking Salt & Iron Co., Columbus, O.,	7 99
Chicago Refrigerator Co., Lafayette, Ind.,	2 49
Eagle Consolidated Refining Co., Cleveland, O.,	16 99
Empire Line, Philadelphia, Pa.,	14 95
Erie Despatch, Indianapolis, Ind.,	3 35
Freedom Oil Works, Freedom, Pa.,	1 98
Great Eastern Line, Montreal, Canada,	84 43
Globe Refining Co., Pittsburg, Pa.,	1 97
Hilt & Lake Ice Co., Indianapolis, Ind.,	1 41
Kilbourne, S. Co., Grand Haven, Mich.,	96 61
Merchants' Despatch Transportation Co., New York, N. Y.,	787 71
Midland Line, Buffalo, N. Y.,	12 04
Mann Brothers, Chicago, Ill.,	23
National Despatch Line, St. Albans, Vt.,	132 49
Nickel Plate Line, Buffalo, N. Y.,	7 58
Pittsburg & Toledo Despatch, Alleghenny. Pa.,	25 78
Parker, D. W., Kalamazoo, Mich.,	3 73
Red Line, Buffalo, N. Y.,	375 63
Rome, Watertown & Ogdensburg Line, Boston, Mass.,	4 23
Rend, W. P. & Co., Chicago, Ill.,	2 83
Rend, W. P. Chicago, Ill.,	72
Swift Refrigerator Line, Chicago, Ill.,	145 19
Street's Stable Car Line, Chicago, Ill.,	4 20
Somers Coal Co., Columbus, O.,	2 78
Southern Iron Car Line, Atlanta, Ga.,	2 03
Southern Despatch Lumber Line, Atlanta, Ga.,	1 94
St. Charles Car Co., St. Louis, Mo.,	1 31
Union Line, Pittsburg, Pa.,	238 99
Union Tank Line, New York, N. Y.,	56 01
West Michigan Equipment Co., & Lumber Line, Grand Rapids, Mich.,	2,667 84
White Line, Buffalo, N. Y.,	18 35
Standard Oil Co., Cleveland, O.,	1 86
Total,	\$8,290 45

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

April 15, Dennis Brennan, brakeman, Woodville. Derailment; unavoidable.

April 23, Cory W. Sherwood, street car driver, Grand Rapids. Struck on crossing; Sherwood himself at fault.

June 11, Jacob Kooi, boy, Grand Haven. Attempted to jump on train; Kooi at fault.

June 17, Orrin Clark, boy, Holland. Struck on R. R. bridge; unavoidable.

August 16, John Vandermere, student, Grand Rapids. Jumped from train; himself at fault.

September 19, Norman Eastman, citizen, Bangor. Struck on crossing; Eastman at fault.

October 19, Henry Gennett, sailor, Benton Harbor. Found dead beside track. Cause of death not known.

October 26, Jas. McLain, woodsman, Fremont. Run over while laying on track in drunken condition.

November 9, Jacob Regemnorter, farmer, Zeeland. Struck on crossing; himself at fault.

## INJURED.

January 18, Jacob C. Whiting, farmer, North Muskegon. Horse ran into train.

February 20, Louis Fritz, farmer, County Line. Horse backed him into train.

February 26, W. J. Cremer, switchman, Muskegon. Mitten stuck to coupling pin; unavoidable.

March 29, John W. McAllister, switchman, Muskegon. Knocked from car; McAllister responsible.

April 10, Wm. Pickett, switchman, Muskegon. Hand caught between draw bars; unavoidable.

April 11, George Rogers, brakeman, Shelby. Thumb caught by pin.

September 22, J. Alway, bridge carpenter, between Pickards' Junction and Fruitport. Fell from bridge; no one responsible.

October 11, Dwight Shoup, brakeman, Big Rapids. Fell from moving cars; no one responsible.

October 17, Henry Conley, section laborer, Watervliet. Attempted to couple cars; he is responsible.

December 12, Lucius Ransom, switchman, North Muskegon. Stumbled while pulling pin. No one responsible.



## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....					5	
Deraillments.....		1				
Falling from trains.....				1		
Frogs.....						
Getting on and off trains.....	1		1			
Highway crossings.....			3			1
Miscellaneous.....				2		1
Overhead obstructions.....						
Trespassers on trains.....			3			
Trespassers on track.....						
Total.....	1	1	7		8	2

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year, - - - -	9
Number of persons injured during the year, - - - -	10
Number of casualties purely accidental, - - - -	7
Number resulting from lack of caution, carelessness, or misconduct, - - - -	10
Persons killed or injured while intoxicated, - - - -	—
Trespassers and tramps killed or injured, - - - -	3
Suicides, - - - -	—

## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....	1	2	3
Conductors.....			
Engineers.....			
Firemen.....			
Laborers.....		1	1
Shopmen.....			
Yardmen.....		4	4
Not classified above.....		1	1
Total.....	1	8	9

STATE OF MICHIGAN, }  
COUNTY OF KENT, } ss.

Chas. M. Heald, General Manager, and U. B. Rogers, Auditor, of the Chicago & West Michigan Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

CHAS. M. HEALD.

U. B. ROGERS.

Subscribed and sworn to before me this 17th day of May, A. D. 1890.

THOMAS C. CLARK, *Notary Public.*

ANNUAL REPORT  
OF THE  
DETROIT, LANSING & NORTHERN RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed May 21, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, NATHANIEL THAYER, Boston, Mass.  
*Secretary and Treasurer*, CHARLES MERRIAM, Boston, Mass.  
*Auditor*, U. B. ROGERS, Grand Rapids, Mich.  
*General Manager*, J. B. MULLIKEN, Detroit, Mich.  
*General Superintendent*, J. K. V. AGNEW, Grand Rapids, Mich.  
*Assistant Superintendent*, F. M. DRAKE, Ionia, Mich.  
*Chief Engineer*, J. J. McVEAN, Grand Rapids, Mich.  
*Traffic Manager*, W. A. CARPENTER, Detroit, Mich.  
*Assistant Treasurer*, J. E. HOWARD, Grand Rapids, Mich.  
*General Passenger and Ticket Agent*, J. F. REEKIE, Detroit, Mich.  
*Assistant General Freight Agent*, E. F. BAKER, Detroit, Mich.  
*Attorney*, CHAS. B. LOTHROP, Detroit, Mich.

DIRECTORS.

H. H. HUNNEWELL, Boston, Mass.  
 GEO. A. SHATTUCK, Boston, Mass.  
 CHAS. L. YOUNG, Boston, Mass.  
 CHAS. MERRIAM, Boston, Mass.  
 CHAS. F. ADAMS, Boston, Mass.  
 NATHANIEL THAYER, Boston, Mass.  
 JAMES H. BLAKE, Boston, Mass.  
 A. H. HARDY, Boston, Mass.  
 JOHN A. BURNHAM, Boston, Mass.  
 E. V. R. THAYER, Boston, Mass.  
 GEORGE WHITNEY, Boston, Mass.

Terms expire May 14, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—December 26, 1876.

Number of stockholders at date of last election,	- - - - -	481
Number of stockholders in Michigan at same date,	- - - - -	1

Amount of full paid stock held in Michigan at same date, - - - - \$10,500 00

Date of annual meeting of stockholders,—Second Wednesday in May.

Fiscal year of company ends,—December 31.

General offices of this company are located at Boston, Mass., Detroit and Grand Rapids, Michigan.

### GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - -		\$1,131,985 91
Total expenses including taxes, - - - -	\$806,924 02	
Net income, - - - -		325,061 89
Interest on funded debt, - - - -	\$237,112 22	
Interest on unfunded debt, - - - -	4,987 07	
Rentals of buildings, tracks, etc., - - - -	89,675 00	
		331,774 29
Balance for the year, - - - -	\$6,712 40	
Balance (profit and loss) last year, - - - -		\$64,307 10
Balance forward to next year, - - - -	57,594 70	
	\$64,307 10	\$64,307 10

### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$4,410,000 00
Par value shares, - - - -	\$100 00
Number of shares issued, - - - -	43,356
Amount paid in on common, - - - -	\$1,825,600 00
Amount paid in on preferred, - - - -	2,510,000 00

Total amount paid in as per books of the company, - 4,335,600 00

Paid in per mile of road owned by company,  
—221.57 miles, - - - - \$19,567 63

### ANALYSIS OF DEBT ACCOUNTS.

#### FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
D., L. & N. R. R. Co., 1st mortgage bonds.....	7%	1907.....	Boston.....	\$2,672,000 00
Ionia & Lansing R. R. Co., 1st mortgage bonds.....	8%	1899.....	New York.....	770,000 00
Total funded debt.....				\$3,442,000 00

## UNFUNDED DEBT.

Total unfunded debt,	-	-	-	-	-	-	-	-	\$466,836 94
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## RECAPITULATION.

Total funded debt,	-	-	-	-	-	-	-	-	\$3,442,000 00
Total unfunded debt,	-	-	-	-	-	-	-	-	466,836 94

Total debt liabilities,	-	-	-	-	-	-	-	-	\$3,908,836 94
-------------------------	---	---	---	---	---	---	---	---	----------------

Amount of debt liabilities per mile of road,—221.57 miles,	17,641 54
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Total amount of stock and debt,	8,244,436 94
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Stock and debt per mile of road,	37,209 17
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## GENERAL BALANCE SHEET.—Dr.

Construction account,	-	-	-	\$6,891,335 85	
Equipment account,	-	-	-	632,975 07	
				<hr/>	\$7,534,310 92
Other investments:					
Construction and equipment Grand Rapids, Lansing & Detroit railroad,	-	-	-	\$1,269,383 50	
Construction and equipment Saginaw & Western railroad,	-	-	-	570,500 00	
				<hr/>	1,839,883 50
Cash items:					
Cash,	-	-	-	\$154,988 55	
Bills receivable,	-	-	-	133,787 21	
Due from agents,	-	-	-	11,147 39	
				<hr/>	299,923 15
Other assets:					
Materials and supplies,	-	-	-	\$48,192 65	
Sinking funds,	-	-	-	210,492 43	
Debit balances from companies and individuals,	-	-	-	219,045 20	
Common stock scrip,	-	-	-	71 00	
				<hr/>	477,801 28
Total,	-	-	-	-	\$10,141,918 85

## GENERAL BALANCE SHEET.—Cr.

Capital stock, D., L. & N. R. R.,	-	-	\$4,335,600 00	
Funded debt,	-	-	3,442,000 00	
			<hr/>	\$7,777,600 00
Capital stock, G. R., L. & D. R. R.,	\$28,000 00			
Capital stock, S. & W. R. R.,	4,500 00			
			<hr/>	\$32,500 00
Funded debt, G. R., L. & D. R. R.,	\$1,108,000 00			
Funded debt, S. & W. R. R.,	566,000 00			
			<hr/>	1,674,000 00
				<hr/>
				1,706,500 00
				<hr/>
				\$9,484,100 00

Unfunded debt, D., L. & N. R. R.:	
Interest unpaid, - - - - -	\$149,381 67
Notes payable, - - - - -	150,000 00
Vouchers and accounts, - - - - -	131,686 18
Other liabilities:	
Net traffic balance due other companies, - - - - -	35,769 09
	<hr/>
	\$466,836 94
Unfunded debt, G. R., L. & N. R. R.:	
Notes payable, - - - - -	133,387 21
Profit and loss or income accounts, - - - - -	57,594 70
	<hr/>
Total, - - - - -	\$10,141,918 85

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment, - - -	\$7,524,310 92
Average cost per mile of road, not including sidings,—	
221.57 miles, - - - - -	33,959 06
Proportion of cost for Michigan, - - - - -	7,524,310 92

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

New buildings, - - - - -	\$4,116 97
New cars, - - - - -	10,000 00
	<hr/>
	\$14,116 97
Total charges to property account, - - - - -	\$14,116 97
Property sold and credited, - - - - -	13,237 83
	<hr/>
Net addition to property account, - - - - -	\$879 14

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares, - - - - -	\$410,194 39
Through fares, - - - - -	51,457 76
	<hr/>
Total passenger fares, - - - - -	\$461,652 15
Express and baggage, - - - - -	17,153 92
Mails, - - - - -	37,721 07
	<hr/>
Total passenger department earnings, - - - - -	\$516,527 14
Proportion for Michigan, - - - - -	\$516,527 14
Per train mile, - - - - -	80
Per mile of road, - - - - -	1,595 80

## FREIGHT EARNINGS.

## Main line and branches:

Local traffic, - - - - -	\$527,867 94	
Through traffic, - - - - -	74,013 02	
Total traffic, - - - - -	\$601,880 96	
Other sources, - - - - -	3,005 76	
Total freight department earnings, - - - - -	- - -	\$604,886 72
Proportion for Michigan, - - - - -	\$604,886 72	
Per train mile, - - - - -	1 35	
Per mile of road, - - - - -	1,868 78	
Total transportation earnings, - - - - -		\$1,121,413 86
Transportation earnings per mile of road, - - - - -	\$3,464 58	
Transportation earnings per train mile, - - - - -	1 03	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From telegraph, - - - - -	\$6,843 76	
From other sources, - - - - -	3,728 29	
		10,572 05
Total, - - - - -		\$1,131,985 91
Total earnings from operation of road, - - - - -		1,131,985 91
Total earnings per mile of road, - - - - -	\$3,497 23	
Total earnings per train mile, - - - - -	1 04	
Proportion of taxable earnings for Michigan, - - - - -		1,131,985 91
Total taxable earnings per mile of road in Michigan, - - - - -	\$3,497 23	
Total income from all sources, - - - - -		\$1,131,985 91
Proportion of income for Michigan, - - - - -		1,131,985 91

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track, - - - - -	\$104,299 52
Renewals of rails, - - - - -	13,160 30
Renewals of ties, - - - - -	31,233 14
Repairs of bridges, including culverts and cattle guards, - - - - -	12,999 33
Repairs of fences, road crossings, and signs, - - - - -	12,519 33
Repairs of buildings, - - - - -	27,331 71
Total, - - - - -	\$175,222 73

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives,	-	-	-	-	-	\$44,855	70
Repairs of passenger cars,	-	-	-	-	-	54,811	04
Repairs of freight cars,	-	-	-	-	-	37,727	83
Total,	-	-	-	-	-	\$137,394	57

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives,	-	-	-	-	-	\$92,842	65
Water supply,	-	-	-	-	-	5,278	33
Oil and waste,	-	-	-	-	-	4,670	59
Locomotive service,	-	-	-	-	-	81,272	76
Passenger train service,	-	-	-	-	-	27,146	56
Passenger train supplies,	-	-	-	-	-	4,200	35
Mileage of passenger cars,	-	-	-	-	-	31	67
Freight train service,	-	-	-	-	-	28,301	89
Freight train supplies,	-	-	-	-	-	2,279	77
Mileage of freight cars,	-	-	-	-	-	11,942	06
Telegraph expenses, maintenance and operating,	-	-	-	-	-	10,850	53
Damage and loss of freight and baggage,	-	-	-	-	-	404	08
Damages to property and cattle,	-	-	-	-	-	2,378	63
Personal injuries,	-	-	-	-	-	1,285	25
Agents and station service,	-	-	-	-	-	91,704	37
Station supplies,	-	-	-	-	-	5,477	35
Total,	-	-	-	-	-	\$370,066	84

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company,	-	-	-	-	-	\$26,469	85
Salaries of clerks in general offices,	-	-	-	-	-	21,242	20
Law expenses,	-	-	-	-	-	4,754	79
Insurance,	-	-	-	-	-	2,858	77
Stationery and printing,	-	-	-	-	-	9,914	14
Outside agencies and advertising,	-	-	-	-	-	8,225	02
Contingencies,	-	-	-	-	-	7,055	77
Taxes,	-	-	-	-	-	23,404	34
Miscellaneous,	-	-	-	-	-	20,315	00
Total,	-	-	-	-	-	\$124,239	88

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings,	21.71	\$175,222 73
Maintenance of motive power and cars,	17.03	137,394 57
Conducting transportation,	45.86	370,066 84
General expenses, including taxes,	15.40	124,239 88
Total operating expenses, and taxes,	100.00	\$806,924 02
Operating expenses and taxes per mile of road,		\$2,492 96
Operating expenses and taxes per train mile run, for trains earning revenue,—1,092,197 miles,	74	



Proportion of operating expenses and taxes		
for Michigan, main line,	\$806,924	02
Total proportion of expenses for Michigan,		\$806,924 02
Percentage of expenses to earnings, 71.28%.		
Net earnings per mile of road,	\$1,004	27
Net earnings per train mile		30

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Detroit to Howard City, August, 1871.  
 From Stanton Junction to Big Rapids, July, 1880.  
 From Kiddville to Belding, July, 1872.  
 From Alma to Howard, August, 1886.  
 From Grand Ledge to Grand Rapids, August, 1888.  
 From Oakdale Park to Reed's Lake, August, 1888.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Detroit to Howard City,	156.60	
Total length completed,		156.60

## BRANCHES.

Belding, from Belding to Kiddville,	1.67	
Stanton, from Stanton Junction to Big Rapids,	63.30	
Total length of branches owned by company,		64.97
Total length of branches owned by company in Michigan,	64.97	
Total length of road belonging to this company,		221.57
Total length of road belonging to this company in Michigan,	221.57	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,	92.83	
Aggregate length of tracks in Michigan belonging to this company, computed as single track,		314.40

Gau ge of track, 4 feet 8½ inches.

*Proprietary or Leased Roads Operated by this Company.*

Name, description, and length of each:	Total Miles.	In Michigan.
Alma to Howard City, S. & W. R. R.,	42.57	
Grand Rapids to Grand Ledge, G. R., L. & D. R. R.,	53.01	
Oakdale Park to Reed's Lake, G. R., L. & D. R. R.,	2.53	
Lansing to North Lansing, M. C. R. R.,	1.00	
Detroit to West Detroit, M. C. R. R.,	3.00	
Total,	102.11	
Total miles operated by the company,		323.68

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of,	8;	aggregate length, feet,	595
Iron bridges, number of,	24;	aggregate length, feet,	2,653
Wooden trestles, number of,	58;	aggregate length, feet,	4,977
Total,	90;		8,225

*Draw Bridges in Michigan.*

How many on your line? - - - - - None.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Flint & Pere Marquette railroad at Plymouth.

Michigan Air Line railway at South Lyon.

Toledo, Ann Arbor & North Michigan railway at Howell Junction.

Chicago & Grand Trunk railway at Trowbridge.

Detroit, Grand Haven & Milwaukee railway at Ionia.

Toledo, Saginaw & Muskegon railroad at Greenville and Sheridan.

Grand Rapids & Indiana railroad at Grand Rapids and Big Rapids.

Lowell & Hastings railroad at Elmdale.

Michigan Central railroad at Grand Rapids.

At what crossings are interlocking and derailling switches in operation?

Toledo, Ann Arbor & North Michigan railway at Howell Junction.

Toledo, Saginaw & Muskegon railroad at Greenville and Sheridan.

Lowell & Hastings railroad at Elmdale.

Grand Rapids & Indiana railroad at Grand Rapids.

Michigan Central railroad at Grand Rapids.

What pattern or patterns have you adopted?

Union Switch & Signal Co. and Gravett.

Number of crossings of highways at grade in this State, - 439

Number of crossings of highways at grade in this State at  
which there are gates or flagmen, - 7

Number of crossings at which there are electric or  
automatic signals, - 1

What pattern or patterns in use?

Pennsylvania Steel Co., electric.

Number of crossings of highways over or under railroad:

Over,—9. Under,—8, - 17

Number of highway bridges 18 feet above track, - 9

Number of highway bridges less than 18 feet above track, None.

Have safety guards been erected at over-head obstructions? Yes.

Are your frogs and guard rails blocked as required by Act  
174, Session Laws 1883? Yes.

How are they treated? Hart guard and blocked with plank.

*Stations.*

Number of stations on whole line, - 80

Same in Michigan, - 80

*Employés.*

Number of persons regularly employed on all roads operated  
by company, including officials, - - - - - 1,076  
Same in Michigan, - - - - - 1,074

Classify your employés as per following list:

Baggagemen, - - - - -	27
Brakemen, - - - - -	68
Conductors, - - - - -	38
Engineers, - - - - -	43
Firemen, - - - - -	44
Laborers, - - - - -	394
Shopmen, - - - - -	204
Yardmen, - - - - -	17
Others, - - - - -	239

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - - 646  
Give the number of miles required to complete fence both sides of your  
track, in Michigan, and the counties in which needed:  
All fenced.

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	66
Average length of sections,—miles, - - - - - 5.50	
Average number of men in each section gang, - - - - -	3
Number of new ties put in whole line during the year, - - - - -	123,586
Number of new ties put in track in Michigan, - - - - -	123,586
Average number of new ties per mile of road, - - - - -	385

New rails put in track:

Steel, tons 856.75, miles 9.30.

Total miles of track laid with new rails, - - - - - 9.30

*Bridges and Culverts.*

Amount of trestle work replaced with earth during year, —linear feet, - - - - -	448
Timber culverts replaced during the year, - - - - -	31
With iron pipe—number, - - - - - 2	
With sewer pipe,—number, - - - - - 29	
New bridges built during the year,—number - - - - -	7

Location.	Kind.	Material.	Month Built.	Feet in Length.
Webberville.....	Pile trestle.....	Wood.....	November.....	56
Williamston.....	Pile trestle.....	Wood.....	November.....	84
Kiddville.....	Howe truss.....	Wood.....	October.....	156
Lennon's cattle pass.....	Pile trestle.....	Wood.....	July.....	42
Wymans.....	Pile trestle.....	Wood.....	September.....	70
West Branch.....	Pile trestle.....	Wood.....	September.....	70
Riverdale.....	Iron girder.....	Iron.....	May and June.....	178
Total.....				651

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - -	36	\$171,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - -	5	24,000 00
Total, - - - - -	41	\$195,000 00
Number of passenger cars—8-wheel, including official cars, - - - - -	39	156,000 00
Number of express and baggage cars, - - -	17	34,000 00
Number of box freight cars, - - - - -	410	164,000 00
Number of stock cars, - - - - -	42	15,750 00
Number of platform cars, - - - - -	539	148,225 00
Number of conductors' way cars, - - - -	27	13,500 00

Other cars as follows:

Road train sleeper, 1; road train dining car, 1; carpenters' cars, 2; bridge car, 1; tool car, 1; painters' car, 1; kitchen 1; steam shovel, 1; tender to steam shovel, 1, - - - - -	10	13,200 00
Total, - - - - -	1,084	\$739,675 00

Number of locomotives equipped with power brakes, - 25  
 Number of passenger train cars equipped with power brakes, - 56  
 Number of freight cars equipped with power brakes, - None.  
 What patterns of power brakes have you in use, and number of locomotives and cars with each?

Westinghouse automatic, locomotives 20, cars 56; American steam, locomotives 4; Eames' vacuum, locomotives 1.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? No.

How are your passenger cars heated? By steam from locomotive.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year, - - -	644,095
Miles run by freight trains during the year, - - -	448,102
Total mileage of trains earning revenue, - - -	1,092,197

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried, - - -	15,118		
Number of local passengers carried, - - -	680,735		
Total number of passengers carried, - - -	695,853		
Total passenger mileage, or passengers carried one mile, - - -		18,400,080	
Average distance traveled by each passenger, - - -			26.442

Average amount received from each passenger,	-	-	\$0 66.34
Average rate of fare per mile for through passengers,	-	-	02.20
Average rate of fare per mile for local passengers,	-	-	02.55
Average rate of fare per mile for all passengers,	-	-	02.50

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	47,141		
Number of tons of local freight carried,	439,483		
Total tons of freight carried,	486,624		
Total mileage of through freight,		7,323,722	
Total mileage of local freight,		32,600,399	
Total freight mileage, or tons carried one mile,		39,924,121	
Average ton haul for through freight,		1 55	
Average ton haul for local freight,		74	
Average ton haul for all freight,		82	
Average amount received for each ton haul,			\$1 23.680
Average rate per ton per mile received for through freight,			01.010
Average rate per ton per mile, received for local freight,			01.619
Average rate per ton per mile, received for all freight,			01.507

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	30,031
Flour,	8,755
Provisions (beef, pork, lard, etc.),	1,344
Animals,	14,537
Other agricultural products,	32,279
Lumber and forest products,	299,437
Coal,	15,567
Plaster, lime and cement,	5,509
Salt,	5,349
Petroleum,	3,100
Railroad iron, iron and steel rails,	2,434
Pig and bloom iron,	1,369
Other iron and castings,	7,445
Stone, brick and sand,	7,904
Manufactures,—articles shipped from point of production,	12,203
Merchandise and other articles not enumerated above,	39,361
Total forwarded,	486,624

*Tonnage of Articles Transported—Entire Road.*

	Tons.	Per Cent.
Grain,	30,031	6.18
Flour,	8,755	1.79
Provisions (beef, pork, lard, etc.),	1,344	.28
Animals,	14,537	2.99

	Tons.	Per Cent.
Other agricultural products, - - - - -	32,279	6.63
Lumber and forest products, - - - - -	299,437	61.54
Coal, - - - - -	15,567	3.19
Plaster, lime and cement, - - - - -	5,509	1.13
Salt, - - - - -	5,349	1.09
Petroleum, - - - - -	3,100	.64
Railroad iron, iron and steel rails, - - - - -	2,434	.51
Pig and bloom iron, - - - - -	1,369	.29
Other iron and castings, - - - - -	7,445	1.53
Stone, brick and sand, - - - - -	7,904	1.62
Manufactures,—articles shipped from point of production, - - - - -	12,203	2.50
Merchandise and other articles not enumerated above, - - - - -	39,361	8.09
Total tons carried, - - - - -	486,624	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company. It handles its own freight.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

To this company; 309.88 miles.

## TRANSPORTATION COMPANIES.

*Sleeping, Drawing-Room and Palace Car Companies.*

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Pullman Palace Car Co., Chicago, - - - - -	\$622 50
Woodruff Sleeping Car Co., Chicago, - - - - -	45 00
Total, - - - - -	\$667 50

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Michigan R. R. Equipment Co., Detroit, Mich.,	\$1,791 00
Blue Line, Rochester, N. Y.,	1,854 22
Merchants' Dispatch, New York,	926 13
Red Line, Buffalo, New York,	734 49
Canada Southern Line, Rochester, New York,	651 26
National Dispatch Line, St. Albans, Vt.,	517 91
Great Eastern Line, Montreal,	374 43
Detroit Iron Furnace Co., Detroit, Mich.,	183 22
West Michigan Equipment Co. & Lumber Line, Grand Rapids, Mich.,	174 45
R. W. & O. Line, Boston, Mass.,	159 65
Union Tank Line, New York,	72 56
Union Line, Pittsburgh, Pa.,	72 48
Empire Line, Philadelphia, Pa.,	33 54
Pittsburg & Toledo Despatch; Allegheny, Pa.,	28 39
Midland Line, Buffalo, New York,	17 00
Erie Dispatch, Indianapolis, Indiana,	6 48
D. W. Parker, Kalamazoo, Mich.,	5 05
White Line, Buffalo, New York,	5 05
Chicago Refrigerator Car Co., Lafayette, Indiana,	4 94
Silas Kilbourn & Co., Grand Haven, Mich.,	4 18
Peerless Tank Line, Cleveland, Ohio,	4 02
Columbus & Hocking Coal & Iron Co., Columbus, O.,	2 72
Burton Stock Car Co., Boston, Mass.,	2 45
E. C. Walker, Detroit, Mich.,	2 19
Southern Dispatch Lumber Line, Atlanta, Ga.,	2 11
Street's Stable Car Line, Chicago, Ills.,	1 53
Armour's Refrigerator Line, Chicago, Ills.,	1 23
Atlanta Stone, Coal & Lumber Co., Atlanta, Ga.,	1 17
Ohio & Western Coal & Iron Co., Columbus, Ohio,	94
C. B. Havens & Co., Omaha, Neb.,	90
S. E. Barrett, Chicago, Ills.,	84
W. P. Rand, Chicago, Ills.,	48
Arms' Palace Horse Car Co., Chicago, Ills.,	47
W. P. Rend & Co., Chicago, Ills.,	15
Total,	\$7,637 63

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

January 4, J. B. W. Drew, Howard. Stepped on track in front of backing train; Drew at fault.

January 25, Fred. Bleumle, citizen, Stanton Junction. Struck on curve; Bleumle at fault.

February 28, F. W. Vealey, brakeman, Brighton. Struck on head by switch target while looking from way car steps.

March 16, W. J. Wilson, Williamston. Jumped from train when in motion; Wilson at fault.

April 6, Wm. Tripp, brakeman, Webberville. Fell from top of train; accidental.

September 19, Albert M. Madden, brakeman, Fowlerville. Fell from locomotive.

October 19, August Grostic, Howell. Drove in front of moving train at crossing; Grostic at fault.

## INJURED.

January 7, Godfrey Wendland, section laborer, Howard City. Foot injured by rail falling upon it.

January 26, Peter Johnson, Greenville. Jumped from train; his own fault.

January 31, George Lane, brakeman, Edmore. Wrist cut by breaking of lantern globe.

March 13, L. W. Seeley, freight conductor, Riverdale. Two ribs cracked while coupling cars.

May 18, H. Rosema and wife, Oakdale Park. Horse ran into train.

September 10, John Corrigan, section laborer, Ionia. Foot injured by rail falling upon it.

December 11, G. E. Jackson, brakeman, Grand Ledge. Hand smashed while coupling cars.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....					2	
Derailments.....						
Falling from trains.....		2				
Frogs.....						
Getting on and off trains.....						1
Highway crossings.....			1			1
Miscellaneous.....		1			3	
Overhead obstructions.....						
Trespassers on trains.....			3			
Trespassers on tracks.....						
Total.....		3	4		5	2

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	-	-	-	-	-	7
Number of persons injured during the year,	-	-	-	-	-	7
Number of casualties purely accidental,	-	-	-	-	-	5
Number resulting from lack of caution, carelessness, or misconduct,	-	-	-	-	-	9
Persons killed or injured while intoxicated,	-	-	-	-	-	
Trespassers and tramps killed or injured,	-	-	-	-	-	2
Suicides,	-	-	-	-	-	



## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....	3	2	5
Conductors.....		1	1
Engineers.....			
Firemen.....			
Laborers.....		2	2
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....	3	5	8

STATE OF MICHIGAN, }  
COUNTY OF KENT, } ss.

Chas. M. Heald, General Manager, and U. B. Rogers, Auditor, of the Detroit, Lansing & Northern Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

CHAS. M. HEALD.  
U. B. ROGERS.

Subscribed and sworn to before me this 22d day of May, A. D. 1890.

JAMES AUSTIN, *Notary Public.*

ANNUAL REPORT  
OF THE  
SAGINAW VALLEY & ST. LOUIS RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed May 21, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JOHN B. MULLIKEN, Detroit, Mich.  
*Secretary and Treasurer*, JAMES E. HOWARD, Grand Rapids, Mich.  
*General Auditor*, C. W. COURTWRIGHT, Boston, Mass.  
*General Manager*, JOHN B. MULLIKEN, Detroit, Mich.  
*General Superintendent*, J. K. V. AGNEW, Grand Rapids, Mich.  
*Ass't Superintendent*, F. M. DRAKE, Ionia, Mich.  
*Chief Engineer*, J. J. McVEAN, Grand Rapids, Mich.  
*Auditor*, U. B. ROGERS, Grand Rapids, Mich.  
*Traffic Manager*, W. A. CARPENTER, Detroit, Mich.  
*General Passenger Agent*, J. F. REEKIE, Detroit, Mich.  
*Ass't General Freight Agent*, E. F. BAKER, Detroit, Mich.  
*Attorney*, CHAS. B. LOTHROP, Detroit, Mich.

DIRECTORS.

H. H. HUNNEWELL, Boston, Mass.  
 CHARLES MERRIAM, Boston, Mass.  
 NATHANIEL THAYER, Boston, Mass.  
 C. F. ADAMS, Boston, Mass.  
 JAS. H. BLAKE, Boston, Mass.  
 A. H. HARDY, Boston, Mass.  
 GEO. O. SHATTUCK, Boston, Mass.  
 CHAS. L. YOUNG, Boston, Mass.  
 JNO. A. BURNHAM, Boston, Mass.  
 E. V. R. THAYER, Boston, Mass.  
 F. H. DAMON, Boston, Mass.  
 GEORGE WHITNEY, Boston, Mass.  
 JOHN B. MULLIKEN, Detroit, Mich.

Terms expire second Wednesday in July, 1890.

STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

When chartered or articles of association filed,—May 17, 1871.

Number of stockholders at date of last election,	-	-	-	-	-	84
Number of stockholders in Michigan at same date,	-	-	-	-	-	66

Amount of full paid stock held in Michigan at same date, - - - - \$25,200

Date of annual meeting of stockholders,—Second Wednesday in July.

Fiscal year of company ends,—December 31.

General offices of the company are located at Detroit, Michigan.

### REMARKS.

This road is operated under lease by the Detroit, Lansing & Northern Railroad Co.

### GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - -		\$96,813 70
Total expenses, including taxes, - - - -	\$57,958 62	
Net income, - - - -		38,855 08
Interest on funded debt, - - - -	\$35,680 00	
Rentals of buildings, tracks, etc., - - - -	7,000 00	
		\$42,680 00
Balance for the year, - - - -	\$3,824 92	
Balance (profit and loss) last year, - - - -	97,259 03	
Items not included in above as follows:		
Miscellaneous income, - - - -		\$456 00
Balance forward to next year, - - - -		100,627 95
	\$101,083 95	\$101,083 95

### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$300,000 00
Par value of shares, - - - \$100 00	
No. of shares issued, - - - 2,553	
Amount paid in on common, - - - -	\$255,300 00
Amount paid in on shares not issued, - - - -	9,504 01
Total amount paid in as per books of the company, -	264,804 01
Paid in per mile of road owned by company, -	
—35.50 miles, - - - -	\$7,459 27

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	When Due.	Interest.		Amount.
		Rate.	Payable.	
First mortgage bonds.....	May 1, 1902...	8%	New York City..	\$446,000 00
Total funded debt.....				\$446,000 00

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For Construction.....		
For Equipment.....		
For Real Estate.....		
For Renewals.....		
For Miscellaneous.....		
For Current Balances.....	To be paid from earnings.....	\$118,602 18
Total unfunded debt.....		\$118,602 18

## RECAPITULATION.

Total funded debt,	\$446,000 00
Total unfunded debt,	118,602 18
Total debt liabilities,	\$564,602 18
Amount of debt liabilities per mile of road,—35.50 miles,	15,904 29
Total amount of stock and debt,	\$829,406 19
Stock and debt per mile of road,—35.50 miles,	23,363 55

## GENERAL BALANCE SHEET.—DR.

Construction account,	\$618,176 81	
Equipment account,	87,037 00	
		\$705,213 81
Cash items:		
Cash,	\$1,991 89	
Due from agents,	159 65	
		2,151 54
Other assets:		
Materials and supplies,	\$303 80	
Debit balances from companies and individuals,	21,109 09	
		21,412 89
Profit and loss,		100,627 95
Total,		\$829,406 19

## GENERAL BALANCE SHEET.—Cr.

Capital stock, - - - - -	\$264,804 01	
Funded debt, - - - - -	446,000 00	
		\$710,804 01
Unfunded debt:		
Interest unpaid, - - - - -	\$6,066 67	
Vouchers and accounts, - - - - -	5,430 62	
Other liabilities:		
Net traffic balance due to other companies,	2,953 69	
Saginaw & Grand Rapids railroad, -	15,833 27	
D., L. & N. railroad, - - - - -	88,317 93	
		118,602 18
Total, - - - - -		\$829,406 19

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment, - - -	\$705,213 81
Average cost per mile of road not including sidings, —35.50 miles, - - - - -	19,893 35
Proportion of cost for Michigan, - - - - -	705,213 81

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares, - - - - -	\$47,205 16
Through fares, - - - - -	1,140 64
Total passenger fares, - - - - -	\$48,345 79
Express and baggage, - - - - -	609 05
Mails, - - - - -	3,300 84
Total passenger department earnings, - - - - -	\$52,255 68
Proportion for Michigan, - - - - -	\$52,255 68
Per train mile, - - - - -	89
Per mile of road, - - - - -	1,158 66

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic, - - - - -	\$40,977 76
Through traffic, - - - - -	2,713 57
Total traffic, - - - - -	\$43,691 33
Other sources, - - - - -	9 00
Total freight department earnings, - - - - -	43,700 33

Proportion for Michigan, - - -	\$43,700 33	
Per train mile, - - -	1 52	
Per mile of road, - - -	968 97	
Total transportation earnings, - - -		\$95,956 01
Transportation earnings per mile of road, - - -	\$2,127 63	
Transportation earnings per train mile, - - -	1 10	
Miscellaneous receipts from operating account, other than from earnings, as follows:		
From telegraph, - - -	109 69	
From other sources, - - -	748 00	857 69
Total earnings from operation of road, - - -		\$96,813 70
Total earnings per mile of road, - - -	\$2,146 65	
Total earnings per train mile, - - -	1 11	
Proportion of taxable earnings for Michigan, - - -	96,813 70	
Total taxable earnings per mile of road in Michigan, - - -	2,146 65	
Income other than from earnings, - - -		456 00
Total income from all sources, - - -		\$97,269 70
Proportion of income for Michigan, - - -		97,269 70

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track, - - -	\$8,407 91
Renewals of rails, - - - (credit)	1,572 23
Renewals of ties, - - -	3,531 54
Repairs of bridges, including culverts and cattle guards, - - -	61 53
Repairs of fences, road crossings, and signs, - - -	671 45
Repairs of buildings, - - -	1,149 87
Total, - - -	\$12,250 07

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives, - - -	\$2,692 97
Repairs of passenger cars, - - -	2,901 28
Repairs of freight cars, - - -	1,345 18
Total, - - -	\$6,939 43

## CLASS 3.—Conducting Transportation.

Fuel for locomotives, - - -	\$6,451 14
Water supply, - - -	351 57
Oil and waste, - - -	627 67
Locomotive service, - - -	6,585 47
Passenger train service, - - -	2,020 91

Passenger train supplies, - - - - -	\$382 45
Mileage of passenger cars, - - - - -	1,617 61
Freight train service, - - - - -	3,058 72
Freight train supplies, - - - - -	54 77
Mileage of freight cars, - - - - -	528 53
Telegraph expenses, maintenance and operating, - - - - -	61 52
Damage and loss of freight and baggage, - - - - -	11 03
Damages to property and cattle, - - - - -	288 04
Personal injuries, - - - - -	32 58
Agents and station service, - - - - -	7,085 25
Station supplies, - - - - -	401 76
<b>Total, - - - - -</b>	<b>\$29,559 02</b>

## CLASS 4.—General Expenses.

Salaries of the general officers of the company, - - - - -	\$2,571 04
Salaries of clerks in general offices, - - - - -	1,867 62
Law expenses, - - - - -	208 36
Insurance, - - - - -	205 58
Stationery and printing, - - - - -	927 06
Outside agencies and advertising, - - - - -	1,186 93
Contingencies, - - - - -	301 03
Taxes, - - - - -	1,942 48
<b>Total, - - - - -</b>	<b>\$9,210 10</b>

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - - - -	21.13	\$12,250 07
Maintenance of motive power and cars, - - - - -	11.98	6,939 43
Conducting transportation, - - - - -	51.00	29,559 02
General expenses, including taxes, - - - - -	15.89	9,210 10
<b>Total operating expenses and taxes, - - - - -</b>	<b>100.00</b>	<b>\$57,958 62</b>
Operating expenses and taxes per mile of road, - - - - -	\$1,285 11	
Operating expenses and taxes per train mile run, - - - - -		
for trains earning revenue,—87,267 miles, - - - - -	67	
Proportion of operating expenses and taxes for Michigan:		
Main line, - - - - -	57,958 62	
<b>Total proportion of expenses for Michigan, - - - - -</b>		<b>57,958 62</b>
Percentage of expenses to earnings,—59.86%.		
Net earnings per mile of road, - - - - -	861 53	
Net earnings per train mile, - - - - -	44	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Saginaw to St. Louis, January, 1873.

From Alma to Ithaca, March, 1883.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Paines to St. Louis,	28.60	
Total length completed,		28.60

## BRANCHES.

Ithaca, from Alma to Ithaca,	6.90	
Total length of branches owned by company,		6.90
Total length of branches owned by company in Michigan,	6.90	
Total length of road belonging to this company,		35.50
Total length of road belonging to this company in Michigan,	35.50	
Aggregate length in Michigan, of sidings, spurs, and other tracks not above enumerated,		5.64
Aggregate length of tracks in Michigan belonging to this company, computed as single track,		41.14
Gauge of track, 4 feet 8½ inches.		

*Proprietary or Leased Roads Operated by this Company.*

Name, description and length of each:

	Total Miles. In Michigan.	
Saginaw & Grand Rapids railroad, St. Louis to Alma,	3.60	3.60
Jackson, Lansing & Saginaw, East Saginaw to Paines,	6.00	6.00
Total,	9.60	9.60
Total miles operated by the company,	45.10	45.10

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of,	4;	aggregate length, feet,	153
Wooden Trestles, number of,	4;	aggregate length, feet,	347
Total,	8;		500

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State and at what locality?

Toledo, Ann Arbor & North Michigan railroad at St. Louis.

Number of crossings of highways at grade in this State, 59

Number of crossings of highways at grade in this State at which there are gates or flagmen, None.

Number of crossings of highways over or under railroad, None.



Number of highway bridges 18 feet above track, - - - None.  
 Are your frogs and guard rails blocked as required by act  
 174, session laws of 1883, - - - Yes.  
 How are they treated? Hart foot guards and blocked with plank.

*Stations.*

Number of stations on whole line, - - - - - 17  
 Same in Michigan, - - - - - 17

*Employés.*

Number persons regularly employed on all roads operated  
 by company, including officials, - - - - - 63  
 Same in Michigan, - - - - - 63

Classify your employés as per following list:

	Number.
Baggagemen, - - - - -	2
Brakemen, - - - - -	4
Conductors, - - - - -	3
Engineers, - - - - -	3
Firemen, - - - - -	4
Laborers, - - - - -	28
Shopmen, - - - - -	4
Others, - - - - -	15

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - - 78.14  
 Give the number of miles required to complete fence both  
 sides of your track in Michigan, and the counties in  
 which needed:  
 All fenced.

*Road Bed and Track.*

Number of track sections in Michigan, - - - - - 7  
 Average length of sections,—miles, - - - - - 5.63  
 Average number of men in each section gang, - - - - - 3  
 Number of new ties put in whole line during the year, - - - 14,866  
 Number of new ties put in track in Michigan, - - - - - 14,866  
 Average number of new ties per mile of road, in Mich., - - - 381  
 New rails put in track:  
 Steel, tons 250.50, miles 3.15.  
 Total miles of track laid with new rails, - - - - - 3.15

*Bridges and Culverts.*

Timber culverts replaced during the year, - - - - - 1  
 With sewer pipe,—number, - - - - - 1  
 New bridges built during the year, - - - - - None.

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	3	\$15,000 00
Total, - - - - -	3	\$15,000 00
Number of passenger cars—8 wheel, including official cars, - - - - -	2	5,000 00
Number of express and baggage cars, - - - - -	1	2,000 00
Number of box freight cars, - - - - -	10	3,000 00
Number of platform cars, - - - - -	40	11,000 00
Number of conductors' way cars, - - - - -	2	500 00
Total, - - - - -	55	\$36,500 00
Number of locomotives equipped with power brakes, - - - - -	2	
Number of passenger-train cars equipped with power brakes, - - - - -	3	
Number of freight cars equipped with power brakes, - - - - -	None.	
What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse automatic air brake, 2 locomotives and 3 cars.		
Are your freight cars being equipped with automatic couplers as required by Act. No. 147, Session Laws of 1885? No.		
What pattern or patterns have you adopted for use? None.		
How are your passenger cars heated? Steam from locomotive.		

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year, - - -	58,505
Miles run by freight trains during the year, - - -	28,762
Total mileage of trains earning revenue, - - -	87,267

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried, - - -	902		
Number of local passengers carried, - - -	97,525		
Total number of passengers carried, - - -	98,427		
Total passenger mileage, or passengers carried one mile, - - -		1,798,585	
Average distance traveled by each passenger, - - -		18	
Average amount received from each passenger, - - -			\$0 49.12
Average rate of fare per mile for through passengers, - - -			02.81
Average rate of fare per mile for local passengers, - - -			02.68
Average rate of fare per mile for all passengers, - - -			02.68

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	1,947		
Number of tons of local freight carried,	55,768		
Total tons of freight carried,	57,715		
Total mileage of through freight,	- - -	87,401	
Total mileage of local freight,	- - -	1,312,346	
Total freight mileage, or tons carried one mile,		1,399,747	
Average ton haul for through freight,	- - -	45	
Average ton haul for local freight,	- - -	24	
Average ton haul for all freight,	- - -	24	
Average amount received for each ton haul,	- - -		\$0 75.70
Average rate per ton per mile, received for through freight,	- - -		03.10
Average rate per ton per mile, received for local freight,	- - -		03.12
Average rate per ton per mile, received for all freight,	- - -		03.12

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	4,725
Flour,	729
Provisions (beef, pork, lard, etc.),	671
Animals,	181
Other agricultural products,	895
Lumber and forest products,	33,158
Coal,	420
Plaster, lime and cement,	862
Salt,	5,773
Petroleum,	394
Pig and bloom iron,	2
Other iron and castings,	539
Stone, brick and sand,	766
Manufactures,—articles shipped from point of production,	1,203
Merchandise and other articles not enumerated above,	7,397
Total tons carried,	57,715

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain,	4,725	8.18
Flour,	729	1.26
Provisions (beef, pork, lard, etc.),	671	1.15
Animals,	181	.31
Other agricultural products,	895	1.55
Lumber and forest products,	33,158	57.45
Coal,	420	.73
Plaster, lime and cement,	862	1.49
Salt,	5,773	10.04
Petroleum,	394	.67

	Tons.	Per Cent.
Pig and bloom iron, - - - - -	2	.03
Other iron and castings, - - - - -	539	.92
Stone, brick and sand, - - - - -	766	1.32
Manufactures,—articles shipped from point of production, - - - - -	1,203	2.08
Merchandise and other articles not enumerated above, - - - - -	7,397	12.82
Total tons carried, - - - - -	57,715	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company. It handles its own freight.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
Western Union Telegraph Company; 38.2 miles.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

Killed, - - - - - None.

## INJURED.

March 26, James Murphy, Merrill. Attempted to get on front end of way car of moving train; Murphy responsible.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....						
Derailements.....						
Falling from trains.....						
Frogs.....						
Getting on and off trains.....						
Highway crossings.....						
Miscellaneous.....						
Overhead obstructions.....						
Trespassers on trains.....						1
Trespassers on tracks.....						
Total.....						1

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	-	-	-	—
Number of persons injured during the year,	-	-	-	—
Number of casualties purely accidental,	-	-	-	—
Number resulting from lack of caution, carelessness, or misconduct,	-	-	-	—
Persons killed or injured while intoxicated,	-	-	-	—
Trespassers and tramps killed or injured,	-	-	-	1
Suicides,	-	-	-	—

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

Employés.	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....			
Conductors.....			
Engineers.....			
Firemen.....			
Laborers.....			
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....			

STATE OF MICHIGAN, }  
COUNTY OF KENT, } ss.

Chas. M. Heald, General Manager, and U. B. Rogers, Auditor, of the Saginaw Valley & St. Louis Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

Signed,

[ L. S. OF R. R. ]

CHAS. M. HEALD.

U. B. ROGERS.

Subscribed and sworn to before me this 17th day of May, A. D. 1890.

THOMAS C. CLARK, *Notary Public.*

ANNUAL REPORT  
OF THE  
SAGINAW & GRAND RAPIDS RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed May 22, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, NATHANIEL THAYER, Boston, Mass.

*Secretary, Treasurer and Transfer Agent*, J. E. HOWARD, Grand Rapids, Mich.

DIRECTORS.

H. H. HUNNEWELL, Boston, Mass.

JNO. H. BURNHAM, Boston, Mass.

GEO. O. SHATTUCK, Boston, Mass.

F. H. DAMON, Boston, Mass.

W. G. MEANS, Boston, Mass.

CHAS. L. YOUNG, Boston, Mass.

CHAS. MERRIAM, Boston, Mass.

N. THAYER, Boston, Mass.

JAS. H. BLAKE, Boston, Mass.

A. H. HARDY, Boston, Mass.

E. V. R. THAYER, Boston, Mass.

W. HUNNEWELL, Boston, Mass.

GEO. WHITNEY, Boston, Mass.

Terms expire July 9, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—October 12, 1878.

Number of stockholders at date of last election, - - - - - 28

Number of stockholders in Michigan at same date, - - - - - None.

Amount of full paid stock held in Michigan at same date, - - - - - None.

Date of annual meeting of stockholders,—Second Wednesday in July.

Fiscal year of company ends,—December 31.

General offices of the company are located at Detroit, Mich.

REMARKS.

This company's road is leased to the Saginaw Valley & St. Louis Railroad Company during the corporate existence of both organizations. That company paying a dividend of ten per cent upon the stock of this company as rental, two per cent of which is set aside to purchase the stock of this company for the use and benefit of the Saginaw Valley & St. Louis Railroad Company.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$70,000 00
Par value of shares, - - - \$100 00	
Average price received per share, 100 00	
No. of shares issued, - - - 700	
Amount paid in on common, -	\$70,000 00
Total amount paid in, as per books of the company, -	70,000 00
Paid in per mile of road owned by company,—miles, 3.60, - - - -	\$19,444 44

## RECAPITULATION.

Total amount of stock, - - - -	70,000 00
Stock and debt per mile of road,—3.60 miles, - - - -	19,444 44

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction, - - - -	\$70,000 00
Average cost of construction per mile of road, not including sidings,—3.60 miles, - - - -	19,444 44
Proportion of cost of construction for Michigan, - - - -	70,000 00

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
May, 1879.

## MAIN LINE.

	Miles, 100ths.	Miles, 100ths.
Length completed in Michigan, - - - -	3.60	
Total length completed, - - - -		3.60
Total length of road belonging to this company, -	3.60	
Total length of road belonging to this company in Michigan, - - - -		3.60
Gauge of track, 4 feet, 8½ inches.		

STATE OF MASSACHUSETTS, } ss.  
COUNTY OF SUFFOLK, }

Nathaniel Thayer, President, and James E. Howard, Secretary, of the Saginaw & Grand Rapids Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed,

NATHANIEL THAYER.  
JAMES E. HOWARD.

Subscribed and sworn to before me this 24th day of March, A. D. 1890,  
by Nathaniel Thayer, President.

F. H. DAMON, *Notary Public.*

STATE OF MICHIGAN, } ss.  
COUNTY OF KENT, }

Subscribed and sworn to before me this 21st day of March, A. D. 1890,  
by James E. Howard, Secretary.

HENRY H. JAMES, *Notary Public.*



ANNUAL REPORT  
OF THE  
SAGINAW & WESTERN RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed May 22, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, NATHANIEL THAYER, Boston, Mass.

*Secretary, Treasurer and Transfer Agent*, J. E. HOWARD, Grand Rapids, Mich.

DIRECTORS.

CHAS. F. ADAMS, Boston, Mass.

CHAS. MERRIAM, Boston, Mass.

GEO. O. SHATTUCK, Boston, Mass.

JAS. H. BLAKE, Boston, Mass.

NATHANIEL THAYER, Boston, Mass.

E. V. R. THAYER, Boston, Mass.

CHAS. L. YOUNG, Boston, Mass.

JNO. A. BURNHAM, Boston, Mass.

A. H. HARDY, Boston, Mass.

Terms expire May 14, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—June 7, 1883.

Number of stockholders at date of last election,	- - - - -	9
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Number of stockholders in Michigan at same date,	- - - - -	None.
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Amount of full paid stock held in Michigan at same date,	- - - - -	None.
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Date of annual meeting of stockholders,—Second Wednesday in May.

Fiscal year of company ends,—December 31.

General offices of the company are located at Detroit, Michigan.

REMARKS.

The road of this company is leased for the term of thirty years from July 1, 1883, to the Detroit, Lansing & Northern Railroad Company, that company paying the interest on the bonds and a dividend of seven per cent per annum on the stock of this company as rental.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$675,000 00
Par value of shares, - - - \$100 00	
Average price received per share, 100 00	
No. of shares issued, - - - 45	
Amount paid in on common, - - - \$4,500 00	
Total amount paid in as per books of company, - - -	4,500 00
Paid in per mile of road owned by company,—	
42.57 miles, - - - - - \$105 71	

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage bonds.....	6%	1918.....	Boston.....	\$566,000 00
Total funded debt.....				\$566,000 00

## UNFUNDED DEBT.

Unfunded debt, - - - - - None.

## RECAPITULATION.

Total funded debt, - - - - -	\$566,000 00
Total debt liabilities, - - - - -	\$566,000 00
Amount of debt liabilities per mile of road,—42.57 miles,	\$13,295 75
Total amount of stock and debt, - - - - -	566,105 71
Stock and debt per mile of road,—42.57 miles, - - -	13,401 46

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year? - - \$33,960 00  
 Was it paid for the last year? Yes.

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction, - - - - -	\$558,400 00
Average cost of construction per mile of road, not including sidings,—42.57 miles, - - - - -	13,117 22
Proportion of cost of construction for Michigan, - - -	558,400 00
Total expended for equipment, - - - - -	12,100 00
Average cost of equipment per mile—42.57, - - - - -	284 24



ANNUAL REPORT  
OF THE  
MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILWAY  
COMPANY,

*For the Year Ending December 31, 1889.*

[Filed May 22, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, THOS. LOWRY, Minneapolis, Minnesota.  
*Vice President*, R. B. LANGDON, Minneapolis, Minnesota.  
*Secretary and Treasurer*, M. P. HAWKINS, Minneapolis, Minnesota.  
*Auditor*, C. W. GARDNER, Minneapolis, Minnesota.  
*General Manager*, F. D. UNDERWOOD, Minneapolis, Minnesota.  
*Division Superintendents*, { W. M. KELLIE, St. Paul, Minnesota.  
                                   { E. PENNINGTON, Minneapolis, Minnesota.  
*Chief Engineer*, W. W. RICH, Minneapolis, Minnesota.  
*General Passenger Agent*, JNO. G. TAYLOR, Minneapolis, Minnesota.  
*Traffic Manager*, H. L. SHUTE, Minneapolis, Minnesota.  
*Attorney*, M. B. KOON, Minneapolis, Minnesota.

DIRECTORS.

THOS. LOWRY, Minneapolis, Minnesota.  
 R. B. LANGDON, Minneapolis, Minnesota.  
 W. D. WASHBURN, Minneapolis, Minnesota.  
 H. E. FLETCHER, Minneapolis, Minnesota.  
 JOHN MARTIN, Minneapolis, Minnesota.  
 J. S. PILLSBURY, Minneapolis, Minnesota.  
 C. H. PETTIT, Minneapolis, Minnesota.

Terms expire September 17, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—June 12, 1888.

Number of stockholders at date of last election,	- - - - -	61
Number of stockholders in Michigan at same date,	- - - - -	None.
Amount of full paid stock held in Michigan at same date,	- - - - -	None.

Date of annual meeting of stockholders,—Third Tuesday in September.

Fiscal year of company ends,—June 30.

General offices of the company are located at Minneapolis, Minnesota.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$1,651,412 11
Total expenses, including taxes, - - -	\$1,063,066 75	
Net income, - - - - -		\$588,345 36
Interest on funded debt, - - - - -	\$962,124 86	
Rentals of buildings, tracks, etc., - - -	84,976 86	
		\$1,047,101 72
Balance for the year, - - - - -	\$458,756 36	
Balance (profit and loss) last year, - - -	709,336 93	
Items not included in above, as follows:		
Development and improvement, - - - - -	7,473 71	
Balance forward to next year, - - - - -		\$1,175,567 00
	\$1,175,567 00	\$1,175,567 00

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$21,000,000 00
Par value shares, - - - - -	\$100 00
Number of shares issued, - - - - -	210,000
*Amount on common, - - - - -	\$14,000,000 00
*Amount on preferred, - - - - -	7,000,000 00
Total amount as per books of the company, - - - - -	21,000,000 00
Per mile of road owned by company,	
—787.32 miles, - - - - -	\$26,672 76

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount Outstanding.
First mortgage Minneapolis & Pacific bonds issued January 1, 1886.....	5%	January 1, 1906...	New York...	\$4,230,000 00
First mortgage Minneapolis, Sault Ste. Marie & Atlantic bonds issued January 1, 1886.....	5%	January 1, 1925...	New York...	10,000,000 00
First mortgage Minneapolis, St. Paul & Sault Ste. Marie consol. bonds issued July 1, 1888...	5%	July 1, 1908.....	New York...	6,710,000 00
Total funded debt.....				\$21,000,000 00

\* Issued for stock of constituent companies under articles of consolidation.

## UNFUNDED DEBT.

For what Incurred.	Is the Same to be Funded, or How Liquidated.	Amount.
For construction .....		
For equipment .....	To be paid from earnings of the road .....	\$107,756 16
For real estate .....	To be paid from sale of real estate .....	88,000 00
For renewals .....		
For miscellaneous .....		
For current balances .....	To be paid from earnings of the road .....	981,467 07
Total unfunded debt .....		\$1,122,223 23

## RECAPITULATION.

Total funded debt,	- - - - -	\$21,000,000 00
Total unfunded debt,	- - - - -	1,122,223 23
Total debt liabilities,	- - - - -	\$22,122,223 23
Amount of debt liabilities per mile of road,—787.32 miles,		28,098 13
Total amount of stock and debt,	- - - - -	\$43,122,223 23
Stock and debt per mile of road,—787.32 miles,	- - -	54,770 89

## GENERAL BALANCE SHEET.—Dr.

*Construction account,	- - - - -	\$31,568,974 89
Equipment account,	- - - - -	2,566,568 42
		\$34,134,543 31
Other investments:		
Aberdeen, Bismark & N. W. R'y,	- - - - -	\$5,394,224 09
Real estate,	- - - - -	149,892 81
Preliminary surveys,	- - - - -	20,805 72
Flour house at St. Albans, Vt.,	- - - - -	2,867 12
		5,567,789 74
Cash items:		
Cash,	- - - - -	\$159,711 71
Due from agents,	- - - - -	96,139 61
		255,851 32
Other assets:		
Materials and supplies,	- - - - -	\$137,208 16
Debit balances from companies and individuals,	- - - - -	110,873 45
Capital stock held by company,	- - - - -	225,600 00
First mortgage M., St. P. & S. S. M. consolidated bonds held by company,	- - - - -	1,500,000 00
Suspense account,	- - - - -	14,690 28
		1,988,371 86
Income account,	- - - - -	1,175,567 00
Total,	- - - - -	\$43,122,223 23

\* Includes \$10,370.25 charged in error, which will be credited back in January, 1890.

## GENERAL BALANCE SHEET.—CR.

Capital stock,	-	-	-	-	-	\$21,000,000	00
Funded debt,	-	-	-	-	-	21,000,000	00
						<hr/>	\$42,000,000 00
Unfunded debt:							
Interest unpaid,	-	-	-	-	-	\$489,375	00
Notes payable,	-	-	-	-	-	440,756	16
Vouchers and accounts,	-	-	-	-	-	73,418	80
Other liabilities:							
Pay rolls,	-	-	-	-	-	79,491	40
Taxes unpaid,	-	-	-	-	-	18,808	65
Due foreign roads,	-	-	-	-	-	20,373	22
						<hr/>	1,122,223 23
Total,	-	-	-	-	-		\$43,122,223 23

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment,	-	-	\$34,134,643	31
Average cost per mile of road, not including sidings,—				
787.32 miles,	-	-	43,355	49
Proportion of cost for Michigan,—192.01 miles,	-	-	8,324,687	37

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Miscellaneous,	-	-	-	-	-	\$272,872	61
New buildings,	-	-	-	-	-	152,294	37
New fences,	-	-	-	-	-	14,477	06
Machinery and tools,	-	-	-	-	-	11,397	21
New locomotives,	-	-	-	-	-	765	29
New cars,	-	-	-	-	-	61,141	67
						<hr/>	\$512,948 21

## BRANCHES.

Miscellaneous,	-	-	-	-	-	584	20
New buildings,	-	-	-	-	-	20	17
						<hr/>	604 37
Total charges to property account,	-					\$513,552	58
Property sold and credited,	-	-	-			120,890	46
						<hr/>	
Net addition to property account,	-					\$392,662	12

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

## Main line and branches:

Local fares, - - - - -	\$185,484 91
Through fares, - - - - -	122,080 83
Total passenger fares, - - - - -	<u>\$307,565 74</u>
Express and baggage, - - - - -	8,759 94
Mails, - - - - -	33,563 38
Other sources, - - - - -	<u>28,613 83</u>

Total passenger department earnings, - - - - - \$378,502 89

Proportion for Michigan, - - - - -	\$110,396 00
Per train mile, - - - - -	70
Per mile of road, - - - - -	473 22

## FREIGHT EARNINGS.

## Main line and branches:

Local traffic, - - - - -	\$683,785 44
Through traffic, - - - - -	537,983 55
Total traffic, - - - - -	<u>\$1,221,768 99</u>
Other sources, - - - - -	<u>23,022 51</u>

Total freight department earnings, - - - - - 1,244,791 50

Proportion for Michigan, - - - - -	\$269,936 73
Per train mile, - - - - -	1 40
Per mile of road, - - - - -	1,556 28

Total transportation earnings, - - - - - \$1,623,294 39

Transportation earnings per mile of road, - - - - -	\$2,029 49
Transportation earnings per train mile, - - - - -	1 14

Miscellaneous receipts from operating account,  
other than for transportation, as follows:

From telegraph, - - - - -	\$7,501 66
From other sources, - - - - -	<u>20,616 06</u>

28,117 72

Total earnings from operation of road, - - - - - \$1,651,412 11

Total earnings per mile of road, - - - - -	\$2,064 65
Total earnings per train mile, - - - - -	1 16
Proportion of taxable earnings for Michigan, - - - - -	405,536 55

Total income from all sources, - - - - - \$1,651,412 11

Proportion of income for Michigan, - - - - - 387,748 85



## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track,	\$134,555 14
Renewals of rails, - - - - - (credit)	18 68
Renewals of ties, - - - - -	427 37
Repairs of bridges, including culverts and cattle guards,	7,034 63
Repairs of fences, road crossings, and signs, - - - - -	875 01
Repairs of buildings, - - - - -	3,336 09
Miscellaneous, - - - - -	249 33
Total, - - - - -	\$146,458 89

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives, - - - - -	\$51,871 80
Repairs of passenger cars, - - - - -	19,803 76
Repairs of freight cars, - - - - -	53,410 40
Repairs of machinery and tools, - - - - -	4,538 99
Total, - - - - -	\$129,624 95

CLASS 3.—*Conducting Transportation.*

Switching charges, - - - - -	\$98 12
Fuel for locomotives, - - - - -	202,676 05
Water supply, - - - - -	12,884 09
Oil and waste, - - - - -	10,334 19
Locomotive service, - - - - -	101,463 19
Passenger train service, - - - - -	24,495 67
Passenger train supplies, - - - - -	5,738 32
Mileage of passenger cars, - - - - - (credit)	2,731 46
Freight train service, - - - - -	56,866 56
Freight train supplies, - - - - -	3,874 80
Mileage of freight cars, - - - - - (credit)	35,187 27
Telegraph expenses, maintenance and operating, - - - - -	28,322 95
Damage and loss of freight and baggage, - - - - -	2,483 90
Damages to property and cattle, - - - - -	6,196 04
Personal injuries, - - - - -	4,859 88
Agents and station service, - - - - -	76,653 89
Station supplies, - - - - -	5,229 89
Wages of switchmen and watchmen, - - - - -	36,521 82
Operating Gladstone docks, - - - - -	31,541 97
Sleeping and dining car expenses, - - - - -	16,457 61
Total, - - - - -	\$588,780 21

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company, - - - - -	\$37,625 77
Salaries of clerks in general offices, - - - - -	39,184 93
Law expenses, - - - - -	10,611 54
Insurance, - - - - -	6,412 56
Stationery and printing, - - - - -	18,211 67
Outside agencies and advertising, - - - - -	25,572 20
Contingencies, - - - - -	39,359 26
Taxes, - - - - -	21,224 77
Total, - - - - -	\$198,202 70

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - -	13.78	\$146,458 89
Maintenance of motive power and cars, -	12.19	129,624 95
Conducting transportation, - -	55.38	588,780 21
General expenses, including taxes, - -	18.65	198,202 70
Total operating expenses, and taxes, -	100.00	\$1,063,066 75
Operating expenses and taxes per mile of road, - - - - -	\$1,329 08	
Operating expenses and taxes per train mile run, for trains earning revenue,—1,428,829 miles, - - - - -	75	
Proportion of operating expenses and taxes for Michigan, main line, - - - - -	\$279,406 72	
Total proportion of expenses for Michigan, - - - - -		\$279,406 72
Percentage of expenses to earnings, 64.3%.		
Net earnings per mile of road, - - - - -	\$735 57	
Net earnings per train mile, - - - - -	41	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Sault Ste. Marie, Michigan, to Boynton, Dakota, January 1, 1888.

From Dresser Junction to St. Croix Falls, Wisconsin, September 12, 1887.

From Cardigan Junction to St. Paul, Minnesota, February 22, 1888.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Sault Ste. Marie to Wisconsin State line, - - - - -	192.01	
In Wisconsin, from Michigan State line to Minnesota State line, - - - - -	262.80	
In Minnesota, from Wisconsin State line to Dakota State line, - - - - -	223.99	
In Dakota, from Minnesota State line to Boynton, Dakota, - - - - -	99.13	
Total length completed, - - - - -		777.93

## BRANCHES.

St. Paul, from Cardigan Junction to St. Paul, -	5.34	
St. Croix, from Dresser Junction to St. Croix Falls, -	4.05	
Total length of branches owned by company, -		9.39
Total length of road belonging to this company, -		787.32
Total length of road belonging to this company in Michigan, - - - - -	192.01	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated, - -	21.83	

	Miles. 100ths.	Miles. 100ths.
Aggregate length of tracks in Michigan belonging to this company, computed as single track, - - -		213.84

Gauge of track, 4 feet 8½ inches.

*Proprietary or Leased Roads Operated by this Company.*

Name, description, and length of each:	Total Miles.	In Michigan.
Operated under trackage rights.		
Northern Pacific R'y tracks at Minneapolis, - - -	4.38	
St. Paul & Duluth R'y tracks at St. Paul, - - -	2.65	
St. Paul, Minneapolis & Manitoba R'y between Minneapolis and St. Paul (operated since July 1, 1889), - - -	11.00	
Total, - - - - -	18.03	
Total miles operated by the company, - - -	799.85	192.01

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of, - 13; aggregate length, feet, -	1,932½
Wooden trestles, number of, - 121; aggregate length, feet, -	13,617½
Total, - - - - - 90; - - - - -	15,549½

*Draw Bridges in Michigan.*

How many on your line? - - - - - None.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?  
 Duluth, South Shore & Atlantic railroad at Trout Lake.  
 Chicago & Northwestern railroad at Hermansville and Eustis.  
 Logging roads at South Manistique, Delta Junction, Mille Coquins, and Naubinway.

What railroads cross your road either over or under your grade in this State, and where?

Over,—Chicago & Northwestern railroad at Flat Rock.	
Number of crossings of highways at grade in this State, -	47
Number of crossings of highways at grade in this State at which there are gates or flagmen, - - - - -	None.
Number of crossings at which there are electric or automatic signals, - - - - -	None.
Number of crossings of highways over or under railroad:	
Over,—2. Under,—0, - - - - -	2
Number of highway bridges 18 feet above track, - - -	2
Number of highway bridges less than 18 feet above track, -	None.
Have safety guards been erected at over-head obstructions? -	No.
Are your frogs and guard rails blocked as required by Act 174, Session Laws 1883? - - - - -	Yes.
How are they treated? Blocked with plank or cinders and sand.	

*Stations.*

Number of stations on whole line, - - - - -	91
Same in Michigan, - - - - -	14

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials, - - - - -	975
Same in Michigan, - - - - -	195

Classify your employés as per following list:

	Number.
Baggagemen, - - - - -	3
Brakemen, - - - - -	20
Conductors, - - - - -	10
Engineers, - - - - -	10
Firemen, - - - - -	10
Laborers, - - - - -	80
Shopmen, - - - - -	5
Yardmen, - - - - -	5
Others, - - - - -	52

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - -	24.6
Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed:	
Chippewa, Schoolcraft, Delta and Menominee counties, 360	
Total miles required, - - - - -	360

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	27
Average length of sections,—miles, - - - - -	7.27
Average number of men in each section gang, - - - - -	3
Number of new ties put in whole line during the year, - - - - -	17,066
Number of new ties put in track in Michigan, - - - - -	3,072
Average number of new ties per mile of road, - - - - -	34.50

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	62	\$500,200 00
Total, - - - - -	62	\$500,200 00
Number of passenger cars—12 wheel, including official cars, - - - - -	8	89,765 00

	Number.	Present Estimated Value.
Number of passenger cars—8-wheel, including official cars, - - - - -	33	\$191,385 00
Number of express and baggage cars, - - - - -	11	27,225 00
Number of box freight cars, - - - - -	2,636	1,054,400 00
Number of stock cars, - - - - -	25	9,450 00
Number of platform cars, - - - - -	776	271,600 00
Number of ore cars, - - - - -	1	300 00
Number of conductors' way cars, - - - - -	35	26,555 00
Other cars, - - - - -	47	30,320 00
Total, - - - - -	3,572	\$2,201,200 00

Number of locomotives equipped with power  
brakes, - - - - - 62

Number of passenger-train cars equipped with  
power brakes, - - - - - 52

Number of freight cars equipped with power  
brakes, - - - - - None.

What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse automatic air brake locomotives 54, passenger cars 22; steam brake locomotives 8.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? Wilson-Blocker patent.

How are your passenger cars heated? Baker improved fire-proof heater.

#### MILEAGE, TRAFFIC, ETC.

##### *Train Mileage.*

Miles run by passenger trains during the year, - - -	507,202
Miles run by freight trains during the year, - - -	780,418
Miles run by mixed trains, - - - - -	141,209
Total mileage of trains earning revenue, - - -	1,428,829

##### *Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Number of through passengers carried, - - -	31,236		
Number of local passengers carried, - - -	164,646		
Total number of passengers carried, - - -	195,882		
Total passenger mileage, or passengers carried one mile, - - - - -		12,033,260	
Average distance traveled by each passenger, - - -		61.43	
Average amount received from each passenger, - - -			\$1 57.00
Average rate of fare per mile for through passengers, - - -			02.13
Average rate of fare per mile for local passengers, - - -			02.94
Average rate of fare per mile for all passengers, - - -			02.54

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	177,263		
Number of tons of local freight carried,	670,602		
Total tons of freight carried,	847,865		
Total mileage of through freight,	- - -	Not reported.	
Total mileage of local freight,	- - -	Not reported.	
Total freight mileage, or tons carried one mile,	-	181,400,365	
Average ton haul for through freight,	- - -	Not reported.	
Average ton haul for local freight,	- - -	Not reported.	
Average ton haul for all freight,	- - -	214	
Average amount received for each ton haul,	- - -		\$1 44.000
Average rate per ton per mile, received for through freight,	- - -	Not reported.	
Average rate per ton per mile, received for local freight,	- - -	Not reported.	
Average rate per ton per mile, received for all freight,	- - -		00.674

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	31,596
Flour,	150,309
Provisions (beef, pork, lard, etc.);	2,602
Animals,	850
Other agricultural products,	14,608
Lumber and forest products,	103,356
Coal,	52,346
Plaster, lime and cement,	2,318
Salt,	3,220
Petroleum,	203
Railroad iron, iron and steel rails,	3,003
Pig and bloom iron,	632
Other iron and castings,	2,285
Ores,	83,230
Stone, brick and sand,	4,654
Manufactures,—articles shipped from point of production,	927
Merchandise and other articles not enumerated above,	34,759
Total forwarded,	490,898

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain,	116,664	13.760
Flour,	158,994	18.752
Provisions (beef, pork, lard, etc.),	3,959	.467
Animals,	9,177	1.082
Other agricultural products,	22,935	2.705
Lumber and forest products,	312,408	36.847
Coal,	53,056	6.258
Plaster, lime and cement,	6,699	.790

	Tons.	Per Cent.
Salt, - - - - -	3,505	.414
Petroleum, - - - - -	294	.035
Railroad iron, iron and steel rails, - - - - -	3,826	.451
Pig and bloom iron, - - - - -	1,589	.187
Other iron and castings, - - - - -	3,470	.409
Ores, - - - - -	83,272	9.821
Stone, brick and sand, - - - - -	8,276	.976
Manufactures,—articles shipped from point of production, - - - - -	1,122	.132
Merchandise and other articles not enumerated above, - - - - -	58,619	6.914
Total tons carried, - - - - -	847,865	100.00

## ADDITIONAL QUESTIONS.

*Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company. Terms,—For a tonnage equal to 2,720 pounds carried 494 miles daily the compensation per month is \$1,041.67; excess to be paid for at the same proportionate rate; does an ordinary express business; we take its freights at the depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

794.35 miles and belongs to the railway company.

*Transportation Companies.*

## SLEEPING, DRAWING-ROOM AND PALACE CAR COMPANIES.

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report? None.

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

Armour & Co., Chicago, Illinois, - - - - -	\$11 26
Total, - - - - -	\$11 26

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

Killed, - - - - - None.

## INJURED.

January 11, Wm. Farr, fireman, Curtis. Cleaning lantern.  
 February 14, W. J. Farnham, fireman, Sturgeon River. Caught in fire door.  
 March 1, C. E. Fay, conductor, Gladstone. Fell under caboose.  
 March 16, Geo. Whitcomb, brakeman, Gladstone. Coupling cars.  
 April 6, Michael Murphy, brakeman Manistique. Coupling cars.  
 May 8, Geo. North, brakeman, Gladstone. Fell from engine.  
 June 14, H. S. Martin, brakeman, Gladstone. Caught in bumpers.  
 June 16, Thos. Murphy, brakeman, Gladstone. Caught in draw-bar.  
 June 16, Jas. Nichols, fireman, Gladstone. Fell from engine.  
 June 18, J. E. Jacobs, brakemen, Ogontz. Caught in car door.  
 June 22, A. Anderson, section hand, Menominee River. Bolt fell on finger.  
 September 9, Alex. Ensle, laborer, Gladstone. Thumb injured by coal bucket.  
 September 11, Jos. Blair, brakeman, Chapin. Coupling cars.  
 September 12, Pat. McCarthy, section hand, Gladstone. Timber fell upon him.  
 September 16, S. E. Leonard, brakeman, Eustis. Fell from train.  
 September 25, Ed. Inman, fireman, Rapid River. Fell off bank.  
 September 28, W. T. Keiler, laborer, Gladstone. Coal fell upon him.  
 October 2, Geo. Gibson, fireman, Manistique. Cinder flew in eye.  
 October 8, E. J. Iliff, section hand, Gladstone. Struck by switch light.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....	-----	-----	-----	-----	-----	-----
Coupling cars.....	-----	-----	-----	-----	8	-----
Derailments.....	-----	-----	-----	-----	-----	-----
Falling from trains.....	-----	-----	-----	-----	4	-----
Frogs.....	-----	-----	-----	-----	-----	-----
Getting on and off trains.....	-----	-----	-----	-----	-----	-----
Highway crossings.....	-----	-----	-----	-----	-----	-----
Miscellaneous.....	-----	-----	-----	-----	12	-----
Overhead obstructions.....	-----	-----	-----	-----	-----	-----
Trespassers on trains.....	-----	-----	-----	-----	-----	-----
Trespassers on track.....	-----	-----	-----	-----	-----	-----
Total.....	-----	-----	-----	-----	19	-----

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year, -	-	-	-	—
Number of persons injured during the year, -	-	-	-	19
Number of casualties purely accidental, -	1	-	-	12



Number resulting from lack of caution, carelessness, or misconduct,	7
Persons killed or injured while intoxicated,	—
Trespassers and tramps killed or injured,	—
Suicides,	—

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....		8	8
Conductors.....		1	1
Engineers.....			
Firemen.....		5	5
Laborers.....		5	5
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....		19	19

STATE OF MINNESOTA, }  
COUNTY OF HENNEPIN, } ss.

F. D. Underwood, General Manager, and C. W. Gardner, Auditor, of the Minneapolis, St. Paul & Sault Ste. Marie Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

F. D. UNDERWOOD.

C. W. GARDNER.

Subscribed and sworn to before me this 20th day of May, A. D. 1890.

W. T. WATKINS, *Notary Public.*

ANNUAL REPORT  
OF THE  
MILWAUKEE & NORTHERN RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed June 2, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, ALFRED M. HOYT, New York.  
*Vice President*, JAMES C. SPENCER, Milwaukee, Wisconsin.  
*Secretary and Treasurer*, CHARLES RAY, Milwaukee, Wisconsin.  
*Auditor*, ROBERT TOOMBS, Milwaukee, Wisconsin.  
*General Manager*, C. F. DUTTON, Milwaukee, Wisconsin.  
*Superintendent*, H. M. BELL, Green Bay, Wisconsin.  
*Chief Engineer*, S. B. FISHER, Green Bay, Wisconsin.  
*Superintendent of Telegraph*, F. D. TUCKER, Green Bay, Wisconsin.  
*Assistant Treasurer*, JOHN C. SPENCER, Milwaukee, Wisconsin.  
*General Passenger Agent*, W. B. SHEARDOWN, Milwaukee, Wisconsin.  
*General Freight Agent*, J. J. COLEMAN, Milwaukee, Wisconsin.  
*Attorney*, A. H. BRIGHT, Milwaukee, Wisconsin.

DIRECTORS.

ALFRED M. HOYT, New York.  
 SAMUEL N. HOYT, New York.  
 ANGUS SMITH, Milwaukee, Wisconsin.  
 EPHRAIM MARINER, Milwaukee, Wisconsin.  
 JAMES C. SPENCER, Milwaukee, Wisconsin.  
 CHARLES RAY, Milwaukee, Wisconsin.  
 CHARLES F. PFISTER, Milwaukee, Wisconsin.

Terms expire October, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—June 5, 1880.

Number of stockholders at date of last election, - - - - - 40

Number of stockholders in Michigan at same date, - - - - - None.

Amount of full paid stock held in Michigan at same date, - - - - - None.

Date of annual meeting of stockholders,—First Tuesday in October.

Fiscal year of company ends,—June 30.

General offices of this company are located at Milwaukee, Wisconsin.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - -		\$1,231,091 33
Total expenses including taxes, - - -	\$838,912 01	
Net income, - - - -		392,179 32
Interest on funded debt, \$281,730 00		
Interest on unfunded debt, 6,227 88		
Rentals of buildings, tracks, etc., 22,598 63		
	\$310,556 51	
Balance applicable to dividends, - -		\$81,622 81
Balance for the year, - - - -		\$81,622 81
Balance (profit and loss) last year, -		213,081 28
Balance forward to next year, - -	\$294,704 09	
	\$294,704 09	\$294,704 09

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$8,000,000 00
Par value of shares, - - - \$100	
No. of shares issued, - - - 51,550	
Amount paid in on common, - - -	\$5,155,000 00
Total amount paid in, as per books of the company, -	\$5,155,000 00
Paid in per mile of road owned by company, —302.50 miles, - - - -	\$17,041 32

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage bonds on road between Schwartzburg and Green Bay, and Hilbert, Menasha, Neenah and Appleton.....	6%	1910.....	New York...	\$2,155,000
First mortgage on road north of Green Bay, and second on road south of Green Bay.....	6%	1913.....	New York...	2,996,000
Total funded debt.....				\$5,551,000

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For construction.....	.....	.....
For equipment.....	.....	.....
For real estate.....	.....	\$177,963 88
For renewals.....	.....	182,898 57
For miscellaneous.....	.....	6,008 20
For current balances.....	.....	.....
Total unfunded debt.....	.....	\$306,370 65

## RECAPITULATION.

Total funded debt,	- - - - -	\$5,151,000 00
Total unfunded debt,	- - - - -	306,370 65
Total debt liabilities,	- - - - -	\$5,457,370 65
Amount of debt liabilities per mile of road,—302.50 miles,		18,040 89
Total amount of stock and debt,	- - - - -	10,612,370 65
Stock and debt per mile of road,—302.50 miles,	- - - - -	35,082 31

## GENERAL BALANCE SHEET.—DR.

Construction and equipment account,	- - - - -	\$10,737,517 61
Cash items:		
Cash,	- - - - -	\$1,235 26
Due from agents,	- - - - -	60,105 12
		61,340 38
Other assets:		
Materials and supplies,	- - - - -	108,206 75
Total,	- - - - -	\$10,907,074 94

## GENERAL BALANCE SHEET.—CR.

Capital stock,	- - - - -	\$5,155,000 00
Funded debt,	- - - - -	5,151,000 00
		\$10,306,000 00
Unfunded debt:		
Interest unpaid,	- - - - -	\$130 00
Vouchers and accounts,	- - - - -	188,276 77
Other liabilities:		
For improvements,	- - - - -	117,963 88
		306,370 65
Profit and loss or income accounts,	- - - - -	294,704 09
Total,	- - - - -	\$10,907,074 74

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment,	-	-	\$10,737,527	61
Average cost per mile of road, not including sidings,—				
302.50 miles,	-	-	35,495	95
Proportion of cost for Michigan,	-	-	2,129,757	00

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings,	-	-	-	\$29,788	24
New bridges,	-	-	-	16	25
New buildings,	-	-	-	35,609	40
Real estate,	-	-	-	1,380	00
New fences,	-	-	-	663	10
Machinery and tools,	-	-	-	11,593	16
New locomotives,	-	-	-	28,729	88
New cars,	-	-	-	60,253	09
				\$168,033	12

## BRANCHES.

Extensions and new sidings,	-	-	-	\$658	53
New buildings,	-	-	-	713	82
				1,372	35
Total charges to property account as above,				\$169,405	47
Net addition to property account,	-	-		\$169,405	47

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Roads.	Local Fares.	Through Fares.	Total Passenger Fares.	Express and Baggage.	Mails.	Other Sources.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
Main line and branches.....	\$284,938 83	\$74,093 70	\$309,037 02	\$21,003 90	\$23,956 15	\$949 60	\$354,999 47	\$67,723 83	\$0 73.50	\$1,114 77
<i>Leased or Proprietary Roads.</i>										
Ontonio & Southwestern.....	276 01	1 70	277 71	63			278 34		63.50	23 19
Total passenger department earnings.....	\$285,204 84	\$74,100 40	\$309,304 74	\$21,007 32	\$23,956 15	\$949 60	\$355,277 81	\$67,723 83	\$0 73.00	\$1,115 05

## FREIGHT EARNINGS.

Roads.	Local Traffic.	Through Traffic.	Total Traffic.	Other Sources.	Total.	Proportion for Michigan.	Per Train Mile.	Per Mile of Road.
Main line and branches.....	\$372,391 83	\$497,064 83	\$870,956 21		\$870,956 21	\$186,150 64	\$1 98.75	\$2,794 99
<i>Leased or Proprietary Roads.</i>								
Ontonio & Southwestern.....	250 29	111 00	370 29		370 29		51.00	30 86
Total freight department earnings.....	\$374,151 12	\$497,175 83	\$871,326 50		\$871,326 50	\$186,150 64	\$1 98.50	\$2,796 14

Total transportation earnings,	-	-	-	\$1,226,604	31
Transportation earnings per mile of road,	-	\$3,851	79		
Transportation earnings per train mile,	-		1	31	
Miscellaneous receipts from operating account, other than for transportation, as follows:					
From other sources,	-	-	-	4,427	02
Total earnings from operation of road,	-	-	-	\$1,231,031	33
Total earnings per mile of road,	-	\$3,865	89		
Total earnings per train mile,	-		1	31.50	
Proportion of taxable earnings for Michigan,		233,375	42		
Total taxable earnings per mile of road in Michigan,	-	-	-	3,863	85
Total income from all sources,	-	-	-	\$1,231,031	33
Proportion of income for Michigan,	-	-	-	234,728	89

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track,	-	-	-	-	\$114,813	88
Renewals of rails,	-	-	-	-	11,749	66
Renewals of ties,	-	-	-	-	14,979	86
Repairs of bridges, including culverts and cattle guards,	-	-	-	-	17,247	00
Repairs of fences, road crossings, and signs,	-	-	-	-	19,200	48
Repairs of buildings,	-	-	-	-	11,719	17
Total,	-	-	-	-	\$189,710	05

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives,	-	-	-	-	\$41,608	07
Repairs of passenger cars,	-	-	-	-	33,731	46
Repairs of freight cars,	-	-	-	-	51,208	51
Total,	-	-	-	-	\$126,548	04

## CLASS 3.—Conducting Transportation.

Fuel for locomotives,	-	-	-	-	\$84,523	26
Water supply,	-	-	-	-	5,298	09
Oil and waste,	-	-	-	-	3,604	18
Locomotive service,	-	-	-	-	97,060	34
Passenger train service,	-	-	-	-	21,979	92
Passenger train supplies,	-	-	-	-	4,157	80
Mileage of passenger cars,	-	-	-	-	985	28
Freight train service,	-	-	-	-	35,066	07
Freight train supplies,	-	-	-	-	3,628	20
Mileage of freight cars,	-	-	-	-	7,518	10
Telegraph expenses (maintenance and operating),	-	-	-	-	20,033	43

Damage and loss of freight and baggage,	-	-	-	867	04
Damages to property and cattle,	-	-	-	2,845	61
Personal injuries,	-	-	-	4,120	40
Agents and station service,	-	-	-	78,347	34
Station supplies,	-	-	-	3,481	68
Total,	-	-	-	\$373,516	74

## CLASS 4.—General Expenses.

Salaries of the general officers of the company,	-	-	-	\$26,135	29
Salaries of clerks in general offices,	-	-	-	18,337	52
Law expenses,	-	-	-	1,954	67
Insurance,	-	-	-	2,514	75
Stationery and printing,	-	-	-	11,508	42
Outside agencies and advertising,	-	-	-	26,022	75
Contingencies,	-	-	-	23,145	46
Taxes,	-	-	-	39,458	32
Total,	-	-	-	\$149,077	18

## RECAPITULATION OF EXPENSES.

		Per Cent of Expenses.	
Maintenance of way and buildings,	-	22.63	\$189,710 05
Maintenance of motive power and cars,	-	15.08	126,548 04
Conducting transportation,	-	44.52	373,516 74
General expenses, including taxes,	-	17.77	149,077 18
Total operating expenses and taxes,	-	100.00	\$838,852 01
Operating expenses and taxes per mile of road,	\$2,634	36	
Operating expenses and taxes per train mile run, for trains earning revenue,—936,830 miles,		0 89.50	
Proportion of operating expenses and taxes for Michigan:			
Main line,	-	160,037	37
Total proportion of expenses for Michigan,	-		160,037 37
Percentage of expenses to earnings,—68.14%.			
Net earnings per mile of road,	-	1,231	53
Net earnings per train mile,	-	0	42

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Schwartzberg to Champion, Nov. 20, 1887.

From Hilbert to Menasha, 1874.

From Menasha to Appleton, 1879.

From Menasha to Neenah, 1880.

From Ellis Junction to Minnekaumee and Menominee, January, 1884.

Oconto & Southwestern railroad:

From Oconto Junction to Oconto, November, 1889.



## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Menominee River to Champion,	58.00	
In Wisconsin, from Schwartzburg to Menominee River,	195.70	
Total length completed,		253.70

## BRANCHES.

Appleton, from Hilbert to Neenah and Appleton,	22.00	
Menominee, from Ellis Junction to Menominee,	24.44	
Menominee, from Marinette to Minnekaumees,	1.80	
Menominee, from Frenchtown to Bay Shore,	1.31	
Total length of branches owned by company,		49.55
Total length of branches owned by company in Michigan,	2.75	
Total length of road belonging to this company,		303.25
Total length of road belonging to this company in Michigan,	60.75	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,	18.19	
Aggregate length of tracks in Michigan belonging to this company, computed as single track,		78.94

Gauge of track, 4 feet, 8½ inches.

*Proprietary or Leased Roads Operated by this Company.*

Name, description and length of each:	Total Miles. In Michigan.	
Chicago, Milwaukee & St. Paul:		
North Milwaukee to Schwartzburg,	6.10	
South Milwaukee to Schwartzburg,	9.10	
Oconto & Southwestern:		
Oconto Junction to Oconto, operated Nov. and Dec.,	12.00	
Total,	27.20	
Total average miles operated by the company during year,	320.45	60.75

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of,	4;	aggregate length, feet,	280
Iron bridges, number of,	1;	aggregate length, feet,	117
Wooden Trestles, number of,	82;	aggregate length, feet,	6,733
Total,	87;		7,130

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State and at what locality?

West Republic Spur of D., S. S. & A. railroad at Republic.  
 Spur to Republic mine, D., S. S. & A. railroad at Republic.  
 Republic branch of D., S. S. & A. railroad two miles north of Republic.  
 Spur to Champion mine, D., S. S. & A. railroad at Champion.  
 Branch to Beacon, C. & N. W. railroad at Wabik.  
 Two crossings of C. & N. W. railroad at Menominee.  
 Ludington mine spur, C. & N. W. railroad at Iron Mountain.

What railroads cross your road either over or under your grade in this State, and where?

Under,—One, C. & N. W. railroad at Iron Mountain.

At what crossings are interlocking and derailing switches in operation?

Republic branch of D., S. S. & A. railroad two miles north of Republic.  
 Branch to Beacon, C. & N. W. railroad at Wabik.

What pattern or patterns have you adopted?

D., S. S. & A., patent of Isham Randolph, Chicago.  
 C. & N. W., Union Switch & Signal Co.

Number of crossings of highways at grade in this State,	20
Number of crossings of highways at grade in this State at which there are gates or flagmen,	None.
Number of crossings of highways over or under railroad,	
Over,—0, under,—1,	1
Have safety guards been erected at over-head obstructions,	Yes.
Are your frogs and guard rails blocked as required by act 174, session laws 1883?	Yes.
How are they treated? Three inch blocks fitted to all the angles.	

*Stations.*

Number of stations on whole line,	65
Same in Michigan,	10

*Employés.*

Number persons regularly employed on all roads operated by company, including officials,	928
Same in Michigan,	87

Classify your employés as per following list:

	Number.
Baggagemen,	10
Brakemen,	58
Conductors,	30
Engineers,	43
Firemen,	42
Laborers,	247
Shopmen,	96
Yardmen,	34
Others,	368

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - - 9.50

Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:

Marquette, - - - - -	40.80
Menominee, - - - - -	10.45

Total miles required, - - - - -	51.25
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*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	8
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Average length of sections,—miles, - - - - -	7
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Average number of men in each section gang, - - - - -	5
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Number of new ties put in whole line during the year, - - - - -	80,700
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Average number of new ties per mile of road, in Mich., - - - - -	266
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New rails put in track:

Steel, tons 3,960.90, miles 42. - - - - -	42
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Total miles of track laid with new rails, all in Wisconsin, - - - - -	42
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## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	33	\$198,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	4	20,000 00
Total, - - - - -	37	\$218,000 00

Number of passenger cars—12-wheel, including official cars, - - - - -	4	13,000 00
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Number of passenger cars—8 wheel, including official cars, - - - - -	21	63,000 00
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Number of express and baggage cars, - - - - -	11	22,000 00
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Number of box freight cars, - - - - -	708	194,700 00
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Number of stock cars, - - - - -	10	2,500 00
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Number of platform cars, - - - - -	207	31,050 00
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Number of ore cars, - - - - -	150	59,250 00
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Number of conductors' way cars, - - - - -	11	7,700 00
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Other cars, gondolas, - - - - -	150	45,000 00
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Total, - - - - -	1,272	\$656,200 00
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Number of locomotives equipped with power brakes, - - - - -	36
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Number of passenger-train cars equipped with power brakes, - - - - -	36
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Number of freight cars equipped with power brakes, - - - - -	None.
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What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse automatic air brake, 24 locomotives and 36 cars; Eames' vacuum brake, 12 locomotives.

Are your freight cars being equipped with automatic couplers as required by Act. No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? Janney.

How are your passenger cars heated? Steam from locomotive.

#### MILEAGE, TRAFFIC, ETC.

##### *Train Mileage.*

Miles run by passenger trains during the year,	-	-	479,438
Miles run by freight trains during the year,	-	-	429,140
Miles run by mixed trains,	-	-	28,252
Total mileage of trains earning revenue,	-	-	936,830

##### *Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried,	21,215		
Number of local passengers carried,	284,401		
Total number of passengers carried,	305,616		
Total passenger mileage, or passengers carried one mile,		11,287,635	
Average distance traveled by each passenger,		37	
Average amount received from each passenger,			\$1 01.00
Average rate of fare per mile for through passengers,			02.58
Average rate of fare per mile for local passengers,			02.80
Average rate of fare per mile for all passengers,			02.74

##### *Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried,	431,273		
Number of tons of local freight carried,	258,586		
Total tons of freight carried,	689,859		
Total mileage of through freight,		54,562,878	
Total mileage of local freight,		18,541,064	
Total freight mileage, or tons carried one mile,		73,103,942	
Average ton haul for through freight,		126.50	
Average ton haul for local freight,		71.70	
Average ton haul for all freight,		106.00	
Average amount received for each ton haul,			\$1 26.000
Average rate per ton per mile received for through freight,			00.911
Average rate per ton per mile, received for local freight,			02.018
Average rate per ton per mile, received for all freight,			01.192

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain, - - - - -	451
Flour, - - - - -	30
Provisions (beef, pork, lard, etc.), - - - - -	154
Animals, - - - - -	274
Other agricultural products, - - - - -	136
Lumber and forest products, - - - - -	37,503
Coal, - - - - -	5
Plaster, lime and cement, - - - - -	18
Petroleum, - - - - -	1
Other iron and castings, - - - - -	118
Ores, - - - - -	150,481
Stone, brick and sand, - - - - -	1,379
Manufactures,—articles shipped from point of production, - - - - -	153
Merchandise and other articles not enumerated above, - - - - -	3,600
<b>Total forwarded, - - - - -</b>	<b>194,303</b>

*Tonnage of Articles Transported—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	48,693	7.06
Flour, - - - - -	16,683	2.42
Provisions (beef, pork, lard, etc.), - - - - -	14,057	2.04
Animals, - - - - -	4,793	.69
Other agricultural products, - - - - -	11,322	1.64
Lumber and forest products, - - - - -	213,102	30.89
Coal, - - - - -	25,541	3.70
Plaster, lime and cement, - - - - -	22,766	3.30
Salt, - - - - -	2,091	.30
Petroleum, - - - - -	1,395	.20
Railroad iron, iron and steel rails, - - - - -	3,097	.45
Pig and bloom iron, - - - - -	20,003	2.90
Other iron and castings, - - - - -	5,243	.76
Ores, - - - - -	177,261	25.69
Stone, brick and sand, - - - - -	29,137	4.23
Manufactures,—articles shipped from point of production, - - - - -	34,954	5.07
Merchandise and other articles not enumerated above, - - - - -	59,721	8.66
<b>Total tons carried, - - - - -</b>	<b>689,859</b>	<b>100.00</b>

**ADDITIONAL QUESTIONS.***Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The American Express Company does a regular express business, paying a rate per day up to a certain weight transported, and on excess over this

fixed weight a rate per 100 pounds. The railroad company keeps cars in repair and running order, and receives and delivers the express company's freight at the railroad company's depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

318 miles of telegraph line, owned jointly by the railroad company and the Western Union Telegraph Company.

TRANSPORTATION COMPANIES.

*Sleeping, Drawing-Room and Palace Car Companies.*

What sleeping, drawing-room, chair, or other palace passenger cars other than the exclusive property of your own or some other railroad company have been in use on your road, in the State of Michigan, during the year, on what terms respectively, and if rented by you or allowed mileage between local points in this State, the amount paid for the use of such cars during the period under report?

Pullman Palace Car Co., Chicago. The railroad company keeps cars in repair; no other compensation paid.

*Fast Freight Lines.*

To what fast freight lines or other transportation companies, running cars upon your road, not the exclusive property of any railroad company paying taxes in this State upon its gross receipts, have you paid car mileage or car rentals, for the use of such cars, while in use for traffic between local points in this State, and what was the amount of such car rental or mileage paid?

An occasional fast freight line car is used for through business for which the railroad company pays three-quarters of one cent per mile. No local freight between Michigan points handled in this class of car.

REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

KILLED.

November 6, John Peterson, yardmaster, Iron Mountain. Coupling; purely accidental.

INJURED.

February 2, Paul Clifford, brakeman, Iron Mountain. Coupling; purely accidental.

February 27, A. J. Reindeau, switchman, Menominee. Coupling; purely accidental.

April 23, Wm. H. King, brakeman, Sagola. Coupling; purely accidental.

June 16, Fred. Richel, brakeman, Sagola. Coupling; purely accidental.

August 7, M. Sherlock, brakeman, Iron Mountain. Coupling; purely accidental.

October 19, J. A. Schriber, brakeman, Groveland. Coupling; purely accidental.

October 26, G. A. Summerfield, brakeman, Iron Mountain. Coupling; purely accidental.

November 4, F. Simpson, brakeman, Granite Bluffs. Coupling; purely accidental.

November 21, C. Wicks, switchman, Iron Mountain. Coupling; purely accidental.

December 2, J. A. Schriber, brakeman, Republic. Coupling; purely accidental.

#### TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....		1			10	
Derailments.....						
Falling from trains.....						
Frogs.....						
Getting on and off trains.....						
Highway crossings.....						
Miscellaneous.....						
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on tracks.....						
Total.....		1			10	

#### SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	-	-	-	-	-	1
Number of persons injured during the year,	-	-	-	-	-	10
Number of casualties purely accidental,	-	-	-	-	-	11
Number resulting from lack of caution, carelessness, or misconduct,	-	-	-	-	-	—
Persons killed or injured while intoxicated,	-	-	-	-	-	—
Trespassers and tramps killed or injured,	-	-	-	-	-	—
Suicides,	-	-	-	-	-	—

#### CLASSIFICATION OF EMPLOYEES.

##### KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....		8	8
Conductors.....			
Engineers.....			
Firemen.....			
Laborers.....			
Shopmen.....			
Yardmen.....	1	2	3
Not classified above.....			
Total.....	1	10	11

STATE OF WISCONSIN, }  
COUNTY OF MILWAUKEE, } ss.

Charles Ray, Secretary, and R. Toombs, Auditor, of the Milwaukee & Northern Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

CHAS. RAY.  
R. TOOMBS.

Subscribed and sworn to before me this 24th day of May, A. D. 1890.

PHILIP D. KENNEDY, *Notary Public.*



ANNUAL REPORT  
OF THE  
GRAND RAPIDS, LANSING & DETROIT, RAILROAD  
COMPANY,

*For the Year Ending December 31, 1889.*

[Filed June 11, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, NATHANIEL THAYER, Boston, Mass.

*Secretary, Treasurer and Transfer Agent*, CHARLES MERRIAM, Boston, Mass.

DIRECTORS.

H. H. HUNNEWELL, Boston, Mass.

CHARLES MERRIAM, Boston, Mass.

GEO. O. SHATTUCK, Boston, Mass.

A. H. HARDY, Boston, Mass.

C. L. YOUNG, Boston, Mass.

NATHANIEL THAYER, Boston, Mass.

J. B. MULLIKEN, Detroit, Mich.

Terms expire second Wednesday in May, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—May 17, 1887.

Number of stockholders at date of last election,	- - - -	8
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Number of stockholders in Michigan at same date,	- - - -	None.
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Amount of full paid stock held in Michigan at same date,	- - - -	None.
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Date of annual meeting of stockholders,—Second Wednesday in May.

Fiscal year of company ends,—December 31.

General offices of the company are located at Grand Rapids, Mich. and Boston, Mass.

REMARKS.

This Road is leased to and operated by the Detroit, Lansing & Northern R. R. Co.

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$450,000 00
Par value of shares, - - - \$100 00	
Average price received per share, 100 00	
No. of shares issued, - - - 280	
Amount paid in on common, - - - \$28,000 00	
Total amount paid in, as per books of the company, -	28,000 00
Paid in per mile of road owned by company, —55.54 miles, - - - - -	\$504 14

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	When Due.	Interest.		Amount.
		Rate.	Payable.	
First mortgage bonds, 1887.....	1927.....	5%	Boston, Mass....	\$1,108,000 00
Total funded debt.....				\$1,108,000 00

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For Construction.....	To be paid.....	\$133,371 12
For Equipment.....		
For Real Estate.....		
For Renewals.....		
For Miscellaneous.....		
For Current Balances.....		
Total unfunded debt.....		\$133,371 12

## RECAPITULATION.

Total funded debt, - - - - -	\$1,108,000 00
Total unfunded debt, - - - - -	133,383 50
Total debt liabilities, - - - - -	\$1,241,383 50
Amount of debt liabilities per mile of road,—55.54 miles,	22,351 16
Total amount of stock and debt, - - - - -	\$1,269,383 50
Stock and debt per mile of road,—55.54 miles, - - - - -	22,855 30

## INTEREST ON THE FUNDED DEBT.

What is the amount of same due each year? - - \$55,400 00  
 Was it paid for the last year? Yes.

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company*

Total expended for construction and equipment,	\$1,269,383 50
Average cost of construction per mile of road, not including	
sidings,—55.54 miles,	22,855 30
Proportion of cost of construction for Michigan,	1,269,383 50

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
 August, 1888.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan, Grand Ledge to Grand Rapids,	53.01	
Total length completed,		53.01

## BRANCHES.

Reed's Lake, from Oakland Park to Reed's Lake,	2.53	
Total length of branches owned by company,		2.53
Total length of branches owned by company in Michigan,	2.53	
Total length of road belonging to this company,		55.54
Total length of road belonging to this company in Michigan,	55.54	
Aggregate length of sidings, spurs, and other tracks not above enumerated,		
Same in Michigan,		
Aggregate length of tracks belonging to this company, computed as single track,	55.54	
Same in Michigan,		55.54

Included in D. L. & N.  
 R. R. report.

Gauge of track, 4 feet 8½ inches.

STATE OF MASSACHUSETTS, } ss.  
COUNTY OF SUFFOLK, }

Nathaniel Thayer, President, and Charles Merriam, Secretary, of the Grand Rapids, Lansing & Detroit Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R. ] Signed,

NATHANIEL THAYER.  
CHARLES MERRIAM.

Subscribed and sworn to before me this 2d day of June, A. D. 1890.

F. H. DAMON, *Notary Public.*

ANNUAL REPORT  
OF THE  
CHICAGO, KALAMAZOO & SAGINAW RAILWAY COMPANY,

*For the Year Ending December 31, 1889.*

[Filed June 11, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, THOS. S. COBB, Kalamazoo, Mich.  
*Vice President*, ANDREW J. BOWNE, Grand Rapids, Mich.  
*Secretary, Auditor and Treasurer*, H. C. POTTER, Kalamazoo, Mich.  
*General Manager*, FRED K. BUSH, Kalamazoo, Mich.  
*General Superintendent*, L. SERGEANT, Kalamazoo, Mich.  
*General Passenger and Freight Agent*, H. C. POTTER, Kalamazoo, Mich.

DIRECTORS.

THOS. S. COBB, Kalamazoo, Mich.  
W. S. DEWING, Kalamazoo, Mich.  
LE ROY CAHILL, Kalamazoo, Mich.  
FRED K. BUSH, Kalamazoo, Mich.  
AMASA B. MATSON, Grand Rapids, Mich.  
ANDREW J. BOWNE, Grand Rapids, Mich.  
CHAS. S. BURTON, Hastings, Mich.

Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—June 7, 1883, amended Dec. 10, 1887.

Number of stockholders at date of last election, - - - - - 10

Number of stockholders in Michigan at same date, - - - - - 10

Amount of full paid stock held in Michigan at same date,—\$71,500 subscribed, 5% paid in.

Date of annual meeting of stockholders,—Second Tuesday in September.

Fiscal year of company ends,—December 31, each year.

General offices of the company are located at Kalamazoo, Mich.

REMARKS.

As previously reported, this corporation entered into a contract on October 11, 1886, with the Kalamazoo & Hastings Construction Co., limited, to build its road. Since that time the work has progressed, and at date of the report, the road has been completed between Kalamazoo and Woodbury (45 miles). Pending construction the road is being

operated by the Construction Co., on its own account, and the earnings, operating expenses and data herein contained are as provided by said Construction Co., for the purpose of making this report to the Commissioner of Railroads, as required by law. No traffic statistics have been kept.

#### GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income,		\$34,330 63
Total expenses, including taxes,	\$17,148 99	
Net income,		\$17,181 64
Balance for the year,		\$17,181 64
Balance (profit and loss last year),		11,784 49
Balance forward to next year,	\$28,966 13	
	\$28,966 13	\$28,966 13

#### ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$2,000,000 00
Par value of shares,	\$100 00
No. of shares issued,	None.
Amount paid in on shares not issued,	\$3,575 00
Total amount paid in, as per books of the company,	3,575 00
Paid in per mile of road owned	
by company,—45 miles,	\$79 44

#### ANALYSIS OF DEBT ACCOUNTS.

##### FUNDED DEBT.

Funded debt,	None.
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##### UNFUNDED DEBT.

Unfunded debt,	None.
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#### RECAPITULATION.

Total amount of stock and debt,	\$3,575 00
Stock and debt per mile of road,—45 miles,	79 44

#### GENERAL BALANCE SHEET.—DR.

Cash items:	
Cash,	\$3,575 00
Other assets:	
Suspense account,	28,966 13
Total,	\$32,541 13

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	-	-	-	-	-	-	\$3,575 00
Profit and loss or income accounts,	-	-	-	-	-	-	28,966 13
Total,	-	-	-	-	-	-	<u>\$32,541 13</u>

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line and branches:							
Total passenger fares,	-	-	-	-	-	\$16,461 76	
Express and baggage,	-	-	-	-	-	571 22	
Mails,	-	-	-	-	-	1,448 97	
Other sources,	-	-	-	-	-	206 94	
Total passenger department earnings,	-	-	-	-	-		\$18,688 89
Proportion for Michigan,	-	-	-	-	-	\$18,688 89	
Per mile of road,	-	-	-	-	-	523 99	

## FREIGHT EARNINGS.

Main line and branches:							
Local traffic,	-	-	-	-	-	\$15,434 80	
Total traffic,	-	-	-	-	-	<u>\$15,434 80</u>	
Total freight department earnings,	-	-	-	-	-		15,434 80
Proportion for Michigan,	-	-	-	-	-	\$15,434 80	
Per mile of road,	-	-	-	-	-	432 75	
Total transportation earnings,	-	-	-	-	-		<u>33,916 75</u>
Transportation earnings per mile of road,	-	-	-	-	-	\$950 94	
Miscellaneous receipts from operating account, other than for transportation, as follows:							
From telephone,	-	-	-	-	-	\$106 94	
From other sources,	-	-	-	-	-	100 00	
Total,	-	-	-	-	-		<u>206 94</u>
Total earnings from operation of road,	-	-	-	-	-		<u>\$34,330 63</u>
Total earnings per mile of road,—35.66 miles,	-	-	-	-	-	\$956 74	
Proportion of taxable earnings for Michigan,	-	-	-	-	-	34,330 63	
Total taxable earnings per mile of road in Michigan,	-	-	-	-	-	956 74	
Total income from all sources,	-	-	-	-	-		<u>\$34,330 63</u>
Proportion of income for Michigan,	-	-	-	-	-		<u>34,330 63</u>

## ANALYSIS OF EXPENSES.

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives,	-	-	-	-	-	-	-	}	\$2,086 53
Repairs of passenger cars,	-	-	-	-	-	-	-		
Repairs of freight cars,	-	-	-	-	-	-	-		
Total,	-	-	-	-	-	-	-		\$2,086 53

## CLASS 3.—Conducting Transportation.

Fuel for locomotives,	-	-	-	-	-	-	-	\$3,006 43
Water supply,	-	-	-	-	-	-	-	100 00
Oil and waste,	-	-	-	-	-	-	-	182 46
Train service,	-	-	-	-	-	-	-	4,260 93
Train supplies,	-	-	-	-	-	-	-	126 41
Mileage of freight cars,	-	-	-	-	-	-	-	11 01
Telephone expenses and rent,	-	-	-	-	-	-	-	295 58
Loss, damage and personal injuries,	-	-	-	-	-	-	-	352 68
Agents and station service,	-	-	-	-	-	-	-	3,286 34
Station supplies,	-	-	-	-	-	-	-	74 22
Total,	-	-	-	-	-	-	-	\$11,696 06

## CLASS 4.—General Expenses.

Salaries of the general officers of the company,	-	-	-	-	-	-	-	\$2,420 00
Stationery and printing,	-	-	-	-	-	-	-	238 06
Contingencies,	-	-	-	-	-	-	-	214 36
Taxes,	-	-	-	-	-	-	-	493 98
Total,	-	-	-	-	-	-	-	\$3,366 40

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of motive power and cars,	12.10	\$2,086 53
Conducting transportation,	68.20	11,696 06
General expenses, including taxes,	19.70	3,366 40
Total operating expenses and taxes,	100.00	\$17,148 99
Operating expenses and taxes per mile of road,	\$480 81	
Proportion of operating expenses and taxes for Michigan:		
Main line,	17,148 99	
Total proportion of expenses for Michigan,		\$17,148 99
Percentage of expenses to earnings,—50.20%.		
Net earnings per mile of road,	475 93	



## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Kalamazoo to Hastings, January 1, 1888.

From Hastings to Woodbury, September 1, 1889.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Kalamazoo to Woodbury.	44.20	
Total length completed, - - - - -		44.20
Total length of road belonging to this company, -		44.20
	Total Miles.	In Michigan.
Total length of road belonging to this company in Michigan,	44.20	
Aggregate length in Michigan, of sidings, spurs, and other tracks not above enumerated, -		3.50
Aggregate length of tracks in Michigan belonging to this company, computed as single track,		47.70
Gauge of track, 4 feet 8½ inches.		
Total miles operated by Construction Co., average,	35.66	35.66

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of, - 38; aggregate length, feet, -	1,430
Total, - - - - - 38; * - - - - -	1,430

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Cincinnati, Jackson & Mackinaw Railroad at Richland Junction.

Michigan Central Railroad at Hastings.

At what crossings are interlocking and derailing switches in operation?

Richland Junction and Hastings.

What pattern or patterns have you adopted?

Gravitt Interlocking Switch & Signal Co.; Union Switch & Signal Co.

Number of crossings of highways at grade in this State, - 64

Number of crossings of highways at grade in this State at which there are gates or flagmen, - 1

Are your frogs and guard rails blocked as required by Act 174, Session Laws 1883? - Yes.

How are they treated? Wood and Ajax patent.

*Stations.*

Number of stations on whole line, - - - - -	12
Same in Michigan, - - - - -	12

*Employés.*

Number persons regularly employed on all roads operated by company, including officials, - - - - -	52
Same in Michigan, - - - - -	52

Classify your employés as per following list:

	Number.
Brakemen, - - - - -	2
Conductors, - - - - -	2
Engineers, - - - - -	2
Firemen, - - - - -	2
Laborers, - - - - -	24
Yardmen, - - - - -	2
Others, - - - - -	18

#### REPAIRS AND RENEWALS.

##### *Fencing in Michigan.*

How many miles of fencing have you? - - - - - 87

Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed:

All fenced.

##### *Road Bed and Track.*

Number of track sections in Michigan, - - - - - 8  
 Average length of sections,—miles, - - - - - 6  
 Average number of men in each section gang, - - - - - 3

##### *Bridges and Culverts.*

New bridges built during the year,—number - - - - - 8

Location.	Kind.	Material.	Month Built.	Feet in Length.
Hastings city.....	.....	Wood.....	January.....	270
Hastings city.....	.....	Wood.....	January.....	12
Hastings city.....	.....	Wood.....	January.....	16
Hastings township (8).....	.....	Wood.....	May.....	48
Woodland township (2).....	.....	Wood.....	May.....	82
Total.....	.....	.....	.....	378

#### ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	3	\$13,000 00
Total, - - - - -	3	\$13,000 00
Number of passenger cars—8-wheel, including official cars, - - - - -	2	4,500 00
Number of platform cars, - - - - -	10	2,000 00
Number of conductors' way cars, - - - - -	1	300 00
Other cars, - - - - -	15	550 00
Total, - - - - -	31	\$20,350 00

Number of locomotives equipped with power  
brakes, - - - - - 2

Number of passenger-train cars equipped with  
power brakes, - - - - - 2

What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse and American.

#### ADDITIONAL QUESTIONS.

##### *Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
45 miles belonging to road operated by telephone.

#### REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

##### KILLED.

Killed, - - - - - None.

##### INJURED.

June 22, John McGuire, roadmaster, near Coates' Grove. Fell from train; lack of caution.

#### TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....						
Deraillments.....						
Falling from trains.....					1	
Frogs.....						
Getting on and off trains.....						
Highway crossings.....						
Miscellaneous.....						
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on tracks.....						
Total.....					1	

#### SUMMARY OF ACCIDENTS IN MICHIGAN.

\* Number of persons killed during the year, - - - —  
 Number of persons injured during the year, - - - —  
 Number of casualties purely accidental, - - - —  
 Number resulting from lack of caution, carelessness, or  
 misconduct, - - - 1  
 Persons killed or injured while intoxicated, - - - —  
 Trespassers and tramps killed or injured, - - - —  
 Suicides, - - - —

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

Employee.	Killed.	Injured.	Total.
Baggagemen .....	-----	-----	-----
Brakemen .....	-----	-----	-----
Conductors .....	-----	-----	-----
Engineers .....	-----	-----	-----
Firemen .....	-----	-----	-----
Laborers .....	-----	-----	-----
Shopmen .....	-----	-----	-----
Yardmen .....	-----	-----	-----
Not classified above .....	-----	1	-----
Total .....	-----	1	-----

STATE OF MICHIGAN, }  
COUNTY OF KALAMAZOO, } ss.

Fred. Bush, General Manager, and H. C. Potter, Secretary, of the Chicago, Kalamazoo & Saginaw Railway Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

FRED. BUSH.  
H. C. POTTER.

Subscribed and sworn to before me this 9th day of June, A. D. 1890.

CHARLES L. COBB, *Notary Public.*

ANNUAL REPORT  
OF THE  
TOLEDO & SOUTH HAVEN RAILROAD COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed June 11, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, LUCIUS CLARK, South Bend, Ind.  
*Vice President*, W. H. McWOOD, San Francisco, Cal.  
*Treasurer*, W. G. GEORGE, South Bend, Ind.  
*General Superintendent*, JOHN IHLLING, Lawton, Mich.  
*Chief Engineer*, JOHN S. CROSS, Bangor, Mich.  
*Attorney*, E. R. ANNABLE, Paw Paw, Mich.

DIRECTORS.

LUCIUS CLARK, South Bend, Indiana.  
W. G. GEORGE, South Bend, Indiana.  
JOHN IHLLING, Lawton, Mich.  
HENRY FORD, Lawton, Mich.  
F. H. ADAMS, Lawton, Mich.  
I. W. FREE, Paw Paw, Mich.  
EDWIN MARTIN, Paw Paw, Mich.  
C. A. CLARK, Marseilles, Ill.

Terms expire January 14, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—April 21, 1876.

Number of stockholders at date of last election,	- - - - -	9
Number of stockholders in Michigan at same date,	- - - - -	6
Amount of full paid stock held in Michigan at same date,	- - - - -	\$98,000 00

Date of annual meeting of stockholders,—Second Tuesday in January.

Fiscal year of company ends,—December 31.

General offices of the company are located at Lawton, Mich.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$24,182 98
Total expenses including taxes, - - - - -	\$14,243 31	
Net income, - - - - -		9,939 67
Interest on funded debt, \$12,960 00		
Interest on unfunded debt, 281 96		
	\$13,241 96	
Balance for the year, - - - - -	\$3,302 29	
Balance (profit and loss) last year, - - - - -	5,366 29	
Balance forward to next year, - - - - -		\$8,668 58
	\$8,668 58	\$8,668 58

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$250,000 00
Par value of shares, - - - - - \$100	
No. of shares issued, - - - - - 2,500	
Amount paid in on common, - - - - -	\$242,500 00
Total amount paid in, as per books of the company, -	\$242,500 00
Paid in per mile of road owned by company, —36.60 miles, - - - - -	\$6,625 68

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
First mortgage, January 1, 1887.....	6%	1917.....	New York...	\$216,000 00
Total funded debt.....				\$216,000 00

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For construction.....		\$9,284 73
For equipment.....		
For real estate.....		
For interest on bonds.....		25,920 00
For miscellaneous (taxes).....		1,665 20
For current balances.....		4,168 58
Total unfunded debt.....		\$41,238 61

## RECAPITULATION.

Total funded debt,	-	-	-	-	-	-	-	\$216,000 00
Total unfunded debt,	-	-	-	-	-	-	-	41,238 61
Total debt liabilities,	-	-	-	-	-	-	-	\$257,238 61
Amount of debt liabilities per mile of road,—36.60 miles,	-	-	-	-	-	-	-	7,028 30
Total amount of stock and debt,	-	-	-	-	-	-	-	499,738 61
Stock and debt per mile of road,—36.60 miles,	-	-	-	-	-	-	-	13,653 98

## GENERAL BALANCE SHEET.—Dr.

Construction account,	-	-	-	-	\$247,778 34	
Equipment account,	-	-	-	-	5,530 00	
						\$253,308 34
Cash items:						
Cash,	-	-	-	-	\$1,632 17	
						1,632 17
Other assets:						
Materials and supplies (wood),	-	-	-	-	\$360 00	
Suspense account,	-	-	-	-	235,769 52	
						236,129 52
Income account,	-	-	-	-	-	8,668 58
Total,	-	-	-	-	-	\$499,738 61

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	-	-	-	-	\$242,500 00	
Funded debt,	-	-	-	-	216,000 00	
						\$458,600 00
Unfunded debt:						
Interest unpaid,	-	-	-	-	\$25,920 00	
Notes payable,	-	-	-	-	4,500 00	
Vouchers and accounts,	-	-	-	-	8,953 31	
Other liabilities:						
Taxes due State of Michigan,	-	-	-	-	1,865 30	
						41,238 61
Total,	-	-	-	-	-	\$499,738 61

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment,	-	-	-	-	\$253,308 34
Average cost per mile of road not including sidings, —36.60 miles,	-	-	-	-	6,920 99
Proportion of cost for Michigan,	-	-	-	-	253,308 34

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings, - - - - -	\$860 86	
Ballasting, surfacing and ditching, - - - - -	2,030 23	
New fences, - - - - -	746 39	
Total, - - - - -		\$3,637 48
Total charges to property account as above, - - - - -		\$3,637 48
Net addition to property account, - - - - -	\$3,637 48	

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line and branches:		
Local fares, - - - - -	\$12,267 18	
Total passenger fares, - - - - -	\$12,267 18	
Express and baggage, - - - - -	1,064 05	
Mails, - - - - -	1,254 20	
Total passenger department earnings, - - - - -		\$14,585 43
Proportion for Michigan, - - - - -	\$14,585 43	
Per train mile, - - - - -	51.35	
Per mile of road, - - - - -	398 51	

## FREIGHT EARNINGS.

Main line and branches:		
Local traffic, - - - - -	\$9,597 55	
Total traffic, - - - - -	\$9,597 55	
Total freight department earnings, - - - - -		9,597 55
Proportion for Michigan, - - - - -	\$9,597 55	
Per train mile, - - - - -	50.10	
Per mile of road, - - - - -	262 23	
Total transportation earnings, - - - - -		\$24,182 98
Transportation earnings per mile of road, - - - - -	\$660 74	
Transportation earnings per train mile, - - - - -	51.09	
Total earnings from operation of road, - - - - -		24,182 98
Total earnings per mile of road, - - - - -	\$660 74	
Total earnings per train mile, - - - - -	51.09	
Proportion of taxable earnings for Michigan, - - - - -	24,182 98	
Total taxable earnings per mile of road in Michigan, - - - - -	660 74	
Total income from all sources, - - - - -		\$24,182 98
Proportion of income for Michigan, - - - - -		24,182 98



## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track, - - - - -	\$2,481 40
Renewals of ties, - - - - -	426 71
Repairs of buildings, - - - - -	31 12
Total, - - - - -	<hr/> \$2,939 23

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives, - - - - -	\$277 82
Repairs of passenger cars, - - - - -	85 06
Repairs of freight cars, - - - - -	183 96
Total, - - - - -	<hr/> \$546 84

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	\$2,041 46
Oil and waste, - - - - -	281 68
Locomotive service, - - - - -	2,263 75
Train service, - - - - -	1,028 75
Telegraph expenses, maintenance and operating, - - - - -	30 90
Damage and loss of freight and baggage, - - - - -	25 47
Damages to property and cattle, - - - - -	20 00
Agents and station service, - - - - -	2,903 84
Station supplies, - - - - -	10 05
Total, - - - - -	<hr/> \$8,605 90

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company, - - - - -	\$1,200 00
Law expenses, - - - - -	15 00
Insurance, - - - - -	55 00
Stationery and printing, - - - - -	263 11
Contingencies, - - - - -	118 71
Taxes, - - - - -	499 52
Total, - - - - -	<hr/> \$2,151 34

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - - - -	20.02	\$2,939 23
Maintenance of motive power and cars, - - - - -	3.84	546 84
Conducting transportation, - - - - -	60.43	8,605 90
General expenses, including taxes, - - - - -	15.11	2,151 34
Total operating expenses, and taxes, - - - - -	100.00	<hr/> \$14,243 31

Operating expenses and taxes per mile of road, - - - - -	\$380 92	
Operating expenses and taxes per train mile run, for trains earning revenue,—47,340 miles, - - - - -	030 09	
Proportion of operating expenses and taxes for Michigan, main line, - - - - -	14,243 31	
Total proportion of expenses for Michigan, - - - - -	- - -	\$14,243 31
Percentage of expenses to earnings, 58.07%.		
Net earnings per mile of road, - - - - -	\$279 82	
Net earnings per train mile, - - - - -	21.09	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Lawton to South Haven, August, 1887.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Lawton to South Haven, -	36.60	
Total length completed, - - - - -		36.60
Total length of road belonging to this company, - - - - -		36.60
Total length of road belonging to this company in Michigan, - - - - -	36.60	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated, - - - - -	1.20	
Aggregate length of tracks in Michigan belonging to this company computed as single track, - - - - -		37.80
Gauge of track, 3 feet.		
Total miles operated by the company, - - - - -	Total Miles. 36.60	In Michigan. 36.60

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of 11; aggregate length, feet,	1,140
Total, - - - - - 11; - - - - -	1,140

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Chicago & West Michigan Railroad at Hartford.

At what crossings are interlocking and derailing switches in operation?

Hartford.

What pattern or patterns have you adopted?

Scotch block put in by the Allentown Rolling Mill, Pa.

Number of crossings of highways at grade in this State, 21

Number of crossings of highways at grade in this State at which there are gates or flagmen, - - - - - None.

*Stations.*

Number of stations on whole line, - - - - -	6
Same in Michigan, - - - - -	6

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials, - - - - -	27
Same in Michigan, - - - - -	27

Classify your employés as per following list:

	Number.
Baggagemen, - - - - -	1
Brakemen, - - - - -	1
Conductors, - - - - -	1
Engineers, - - - - -	2
Firemen, - - - - -	2
Laborers, - - - - -	13
Shopmen, - - - - -	1
Others, - - - - -	6

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - -	47
Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed:	
Van Buren County, - - - - -	25
Total miles required, - - - - -	25

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	6
Average length of sections,—miles, - - - - -	6
Average number of men in each section gang, - - - - -	2
Number of new ties put in whole line during the year, - - - - -	3,042
Number of new ties put in track in Michigan, - - - - -	3,042
Average number of new ties per mile of road, - - - - -	83

## ROLLING STOCK.

Number of locomotives of 10 to 20 tons weight, exclusive of tender, - - - - -	3	\$11,000 00
Total, - - - - -	3	\$11,000 00
Number of passenger cars—8-wheel, including official cars, - - - - -	2	3,500 00
Number of combination passenger cars—8-wheel, - - - - -	2	2,500 00
Number of box freight cars, - - - - -	12	3,600 00
Number of platform cars, - - - - -	16	3,300 00
Other cars, - - - - -	13	590 00
Total, - - - - -	45	\$24,490 00

Number of locomotives equipped with power brakes, 2  
 Number of passenger train cars equipped with power brakes, 4  
 Number of freight cars equipped with power brakes, 1  
 What patterns of power brakes have you in use, and number of locomotives and cars with each?  
 Eames Vacuum.  
 Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? No.  
 How are your passenger cars heated? Stoves.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year,	-	-	28,404
Miles run by freight trains during the year,	-	-	18,936
Total mileage of trains earning revenue,	-	-	47,340

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Number of local passengers carried,	37,410		
Total number of passengers carried,	37,410		
Total passenger mileage, or passengers carried one mile,		408,906	
Average distance traveled by each passenger,		10.99	
Average amount received from each passenger,			\$0 32.8
Average rate of fare per mile for local passengers,			03.
Average rate of fare per mile for all passengers,			03.

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of local freight carried,	11,673		
Total tons of freight carried,	11,673		
Total mileage of local freight,		212,360	
Total freight mileage, or tons carried one mile,		212,360	
Average ton haul for local freight,		18.36	
Average ton haul for all freight,		18.36	
Average amount received for each ton haul,			\$0 82.220
Average rate per ton per mile, received for local freight,			04.520
Average rate per ton per mile, received for all freight,			04.520

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	875
Flour,	710
Provisions (beef, pork, lard, etc.),	96

	Tons.
Animals, - - - - -	322
Other agricultural products, - - - - -	1,661
Lumber and forest products, - - - - -	5,604
Coal, - - - - -	259
Plaster, lime and cement, - - - - -	84
Salt, - - - - -	171
Petroleum, - - - - -	124
Ores, - - - - -	60
Stone, brick and sand, - - - - -	43
Merchandise and other articles not enumerated above, - - - - -	1,664
<b>Total forwarded,</b> - - - - -	<b>11,673</b>

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	875	7.48
Flour, - - - - -	710	6.32
Provisions (beef, pork, lard, etc.), - - - - -	96	.80
Animals, - - - - -	322	2.73
Other agricultural products, - - - - -	1,661	14.20
Lumber and forest products, - - - - -	5,604	47.99
Coal, - - - - -	259	2.20
Plaster, lime and cement, - - - - -	84	.70
Salt, - - - - -	171	1.44
Petroleum, - - - - -	124	1.04
Other iron and castings, - - - - -	60	.49
Stone, brick and sand, - - - - -	43	.36
Merchandise and other articles not enumerated above, - - - - -	1,664	14.25
<b>Total tons carried,</b> - - - - -	<b>11,673</b>	<b>100.00</b>

STATE OF MICHIGAN, }  
COUNTY OF VAN BUREN, } ss.

John Ihling, Superintendent, of the Toledo & South Haven Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

Signed,

[L. S. OF R. R.]

JOHN IHLING.

Subscribed and sworn to before me this 9th day of June, A. D. 1890.

ANNA E. POTTER, *Notary Public.*

ANNUAL REPORT  
OF THE  
TOLEDO, SAGINAW & MACKINAW RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed June 20, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, AMMI W. WRIGHT, East Saginaw, Mich.  
*Secretary*, WILLIAM C. McCLURE, East Saginaw, Mich.  
*Treasurer*, W. R. BURT, East Saginaw, Mich.

DIRECTORS.

A. W. WRIGHT, Alma, Mich.  
P. H. KETCHAM, East Saginaw, Mich.  
WM. C. McCLURE, East Saginaw, Mich.  
W. R. BURT, East Saginaw, Mich.  
C. W. WELLS, East Saginaw, Mich.  
F. C. STONE, East Saginaw, Mich.

Terms expire when successors are elected.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—June 29, 1887.

Number of stockholders at date of last election, - - - - -	6
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Number of stockholders in Michigan at same date, - - - - -	6
--	---

Amount of full paid stock held in Michigan at same date,—No stock issued.

Date of annual meeting of stockholders,—April 16, 1889.

Fiscal year of company ends,—December 31, each year,

General offices of the company are located at East Saginaw, Mich.

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$2,500,000 00
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Par value of shares, - - - - -	\$100 00
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Amount paid in on shares not issued, -	\$1,071,922 30
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Total amount paid in, as per books of the company, -	1,071,922 30
--	--------------

Paid in per mile of road owned by company,—miles, 62, - - - - -	\$17,385 84
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## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt, - - - - - None.

## UNFUNDED DEBT.

For construction and equipment, - - - - - \$836,866 23

## RECAPITULATION.

Total unfunded debt, - - - - - \$836,866 23

Total debt liabilities, - - - - - \$836,866 23

Amount of debt liabilities per mile of road,—62 miles, - 13,497 84

Total amount of stock and debt, - - - - - \$1,908,788 53

Stock and debt per mile of road, - - - - - 30,883 68

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction, - - - - - \$1,900,000 00

Average cost of construction per mile of road, not including  
sidings,—62 miles, - - - - - 31,512 90

Proportion of cost of construction for Michigan, - - - 1,900,000 00

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
January 11, 1890.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
Length completed in Michigan, - - - - -	62.00	

Total length completed, - - - - -	62.00
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Total length of road belonging to this company,	62.00
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Total length of road belonging to this company in Michigan, - - - - -	62.00
--	-------

Aggregate length of sidings, spurs and other tracks not above enumerated, - - - - -	14.00
--	-------

Same in Michigan, - - - - -	14.00
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Aggregate length of tracks belonging to this company, computed as single track, - - - - -	76.00
--	-------

Same in Michigan, - - - - -	76.00
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Gauge of track, 4 feet, 8½ inches.

STATE OF MICHIGAN, }  
COUNTY OF SAGINAW, } ss.

P. H. Ketcham, Vice President, Wm. C. McClure, Secretary, of the Toledo, Saginaw & Mackinaw Railroad Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the stock, debt, and other matters as therein contained of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

P. H. KETCHAM.  
W. C. MCCLURE.

Subscribed and sworn to before me this 19th day of June, A. D. 1890.

WARREN M. TRUDE, *Notary Public.*



ANNUAL REPORT  
OF THE  
MANISTEE & NORTHEASTERN RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed June 25, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President and General Manager*, EDWARD BUCKLEY, Manistee, Mich.  
*Vice President*, CHAS. F. RUGGLES, Manistee, Mich.  
*Secretary, Auditor and Treasurer*, WM. J. LAW, Manistee, Mich.  
*General Superintendent*, WM. DOUGLAS, Manistee, Mich.  
*Chief Engineer*, J. J. HUBBELL, Manistee, Mich.  
*General Passenger and Freight Agent*, H. W. CUNNINGHAM, Manistee, Mich.

DIRECTORS.

EDWARD BUCKLEY, Manistee, Mich.  
 WM. DOUGLAS, Manistee, Mich.  
 WM. J. LAW, Manistee, Mich.  
 CHAS. G. WILSON, Manistee, Mich.  
 T. J. ELTON, Manistee, Mich.

Terms expire January 7, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—January 12, 1887.

Number of stockholders at date of last election, - - - - - 7

Number of stockholders in Michigan at same date, - - - - - 7

Amount of full paid stock held in Michigan at same date, - - - - \$30,000 00

Date of annual meeting of stockholders,—January 7.

Fiscal year of company ends,—December 31.

General offices of the company are located at Manistee Mich.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$46,620 09
Total expenses, including taxes, - - - - -	\$44,103 83	
Net income, - - - - -		2,516 26
Interest on unfunded debt, - - - - -	\$31,827 53	
Balance for the year, - - - - -	\$29,311 27	
Balance forward to next year, - - - - -		\$29,311 27
	\$29,311 27	\$29,311 27

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$600,000 00
Par value of shares, - - - \$100 00	
No. of shares issued, - - - 6,000	
Amount paid in on common, - - - - -	\$30,000 00
Total amount paid in as per books of the company, -	30,000 00
Paid in per mile of road owned by company, -	
—39.90 miles, - - - - -	\$751 89

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt, - - - - -	None.
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## UNFUNDED DEBT.

For what Incurred.	Is the Same to be Funded, or How Liquidated.	Amount.
For construction .....	} To be funded..... }	\$481,791 06
For equipment.....		
For real estate.....		85,291 67
For renewals.....		
For miscellaneous.....		
For current balances.....		
Total unfunded debt.....		\$567,083 33

## RECAPITULATION.

Total unfunded debt, - - - - -	\$567,083 33
Total debt liabilities, - - - - -	\$567,083 33
Amount of debt liabilities per mile of road,—39.90 miles, -	14,212 61
Total amount of stock and debt, - - - - -	\$597,083 33
Stock and debt per mile of road,—39.90 miles, - - -	14,970 50

## GENERAL BALANCE SHEET.—Dr.

Construction account,	-	-	-	\$482,480	39	
Equipment account,	-	-	-	85,291	67	
						\$567,772 06
Profit and loss or income accounts,	-	-	-	-	-	29,311 27
Total,	-	-	-	-	-	\$597,083 33

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	-	-	-	-	-	\$30,000 00
Unfunded debt:						
Interest unpaid,	-	-	-	-	-	} 567,083 33
Dividends unpaid,	-	-	-	-	-	
Notes payable,	-	-	-	-	-	
Vouchers and accounts,	-	-	-	-	-	
Other liabilities,	-	-	-	-	-	
Total,	-	-	-	-	-	\$597,083 33

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment,	-	-	\$567,772 06
Average cost per mile of road, not including sidings,—			
39.90 miles,	-	-	12,092 24
Proportion of cost for Michigan,—39.90 miles,	-	-	567,772 06

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line and branches:			
Local fares,	-	-	\$18,037 25
Through fares,	-	-	37 30
Total passenger fares,	-	-	\$18,074 55
Express and baggage,	-	-	86 00
Mails,	-	-	164 70
Total passenger department earnings,	-	-	\$18,325 25
Proportion for Michigan,	-	-	\$18,325 25
Per train mile,	-	-	74.60
Per mile of road,	-	-	763 55

## FREIGHT EARNINGS.

Main line and branches:			
Local traffic,	-	-	\$28,294 84
Total traffic,	-	-	\$28,294 84
Total freight department earnings,	-	-	28,294 84

Proportion for Michigan, - - -	\$28,294 84	
Per train mile, - - - - -	1 50.66	
Per mile of road, - - - - -	1,178 95	
Total transportation earnings, - - - - -		\$46,620 09
Transportation earnings per mile of road, -	\$1,942 50	
Transportation earnings per train mile, -	1 07	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
From telegraph, - - - - -		44 43
Total earnings from operation of road, - - -		\$46,664 52
Total earnings per mile of road, - - -	\$1,169 54	
Total earnings per train mile, - - -	1 07	
Proportion of taxable earnings for Michigan, -		46,664 52
Total taxable earnings per mile of road in Michigan, - - - - -	\$1,169 54	
Total income from all sources, - - - - -		46,664 52
Proportion of income for Michigan, - - - - -		46,664 52

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track, - - - - -	\$7,951 85
Repairs of bridges, including culverts and cattle guards, -	1,723 93
Repairs of fences, road crossings and signs, - - - - -	3 35
Repairs of buildings, - - - - -	8 00
Total, - - - - -	\$9,687 13

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives, - - - - -	\$2,067 11
Repairs of passenger cars, - - - - -	567 18
Repairs of freight cars, - - - - -	1,065 03
Total, - - - - -	\$3,699 32

## CLASS 3.—Conducting Transportation.

Fuel for locomotives, - - - - -	\$8,945 21
Oil and waste, - - - - -	1,422 69
Locomotive service, - - - - -	5,677 61
Passenger train service, - - - - -	2,160 40
Passenger train supplies, - - - - -	540 19
Freight train service, - - - - -	2,370 15
Freight train supplies, - - - - -	429 13
Telegraph expenses (maintenance and operating), - -	45 40

1889.]

## MANISTEE &amp; NORTHEASTERN RAILROAD CO.

531

Damages to property and cattle, - - - - -	\$100 00
Agents and station service, - - - - -	2,428 80
Station supplies, - - - - -	363 49
Total, - - - - -	<u>\$24,483 07</u>

## CLASS 4.—General Expenses.

Salaries of the general officers of the company, - - -	}	\$6,234 31
Salaries of clerks in general offices, - - -		
Law expenses, - - - - -		
Insurance, - - - - -		
Stationery and printing, - - - - -		
Outside agencies and advertising, - - - - -		
Contingencies, - - - - -		
Taxes, - - - - -	}	<u>\$6,234 31</u>
Total, - - - - -		

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - -	21.96	\$9,687 13
Maintenance of motive power and cars, - - -	8.39	3,699 32
Conducting transportation, - - -	55.51	24,483 07
General expenses, including taxes, - - -	14.14	6,234 31
Total operating expenses and taxes, - - -	100.00	<u>\$44,103 83</u>

Operating expenses and taxes per mile of road, (average of 24 miles,) - - -	\$1,837 66
Operating expenses and taxes per train mile run, for trains earning revenue,—43,325 miles, - - -	1 01.798
Proportion of operating expenses and taxes for Michigan:	
Main line, - - - - -	44,103 83
Total proportion of expenses for Michigan, - - -	<u>44,103 83</u>

Percentage of expenses to earnings,—94.603%.	
Net earnings per mile of road,—average of 24 miles, - - -	104 84
Net earnings per train mile,—43,325 miles, - - -	05.808

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Manistee to Nessen City, November 20, 1888.

## BRANCHES.

From main line to Onekama, January 14, 1889.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Manistee to Nessen City,	32.94	

Total length completed,	- - - -	32.94
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## BRANCHES.

Onekama, from main line to Onekama,	- - -	2.71
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Bear Creek, from main line to Peter's Camp,	- - -	4.25
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Total length of branches owned by company,	-	6.96
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Total length of branches owned by company in Michigan,	- - - - -	6.96
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Total length of road belonging to this company,		39.90
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Total length of road belonging to this company in Michigan,	39.90	
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Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,	- - -	4.50
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Aggregate length of tracks in Michigan belonging to this company, computed as single track,	-	44.40
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Gauge of track, 4 feet, 8½ inches.

Total average miles operated by the company	Total Miles. In Michigan.	24.00	24.00
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*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of,	3;	aggregate length, feet,	-	152
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Wooden trestles, number of,	2;	aggregate length, feet,	-	480
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Total,	- - - -	5;	- - - -	632
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*Draw Bridges in Michigan.*

How many on your line?	- - - - -	1
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Where located, when built and length of draw span:

Located at Manistee over the Manistee River; built in 1888; length of draw span 160 feet.

Character of structure:

Howe truss.

Material of which constructed:

Wood and iron.

Height above water, and depth of water under bridge:

12 feet; 14 feet.

How swung, by engine or hand power?

Hand.

Approaches, straight or curved:

Curved.

Do you require all trains to come to a full stop before crossing the draw, and how are they signalled?

Yes; by a Gravit derailing semaphore.

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State and at what locality?

Flint & Pere Marquette railroad at Manistee.

Toledo, Ann Arbor & North Michigan railway at Copemish.

At what crossings are interlocking and derailling switches in operation?

Flint & Pere Marquette, Manistee, Mich.

What pattern or patterns in use?

The Gravit.

Number of crossings of highways at grade in this State, - 24

Number of crossings of highways at grade in this State at  
which there are gates or flagmen, - 2

Are your frogs and guard rails blocked as required by act  
174, session laws 1883? Yes.

How are they treated? Mostly wood, some with steel.

*Stations.*

Number of stations on whole line, - - - - - 15

Same in Michigan, - - - - - 15

*Employés.*

Number of persons regularly employed on all roads operated  
by company, including officials, - - - - - 150

Same in Michigan, - - - - - 150

Classify your employés as per following list:

Baggagemen, - - - - -	1
Brakemen, - - - - -	3
Conductors, - - - - -	3
Engineers, - - - - -	3
Firemen, - - - - -	3
Laborers, - - - - -	132
Shopmen, - - - - -	3
Yardmen, - - - - -	2

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - - 15

Give the number of miles required to complete fence both  
sides of your track, in Michigan, and the counties in  
which needed:

Manistee, - - - - - 57

Total miles required, - - - - - 57

*Road Bed and Track.*

Number of track sections in Michigan, - - - - - 5

Average length of sections,—miles, - - - - - 7

Average number of men in each section gang, - - - - - 6

*Bridges and Culverts.*

New bridges built during the year, - - - - - 3

Location.	Kind.	Material.	Month Built.	Feet in Length.
Two miles north of Lemon Lake.....	Trestle.....	Wood.....	August.....	240
Three miles north of Lemon Lake.....	Trestle.....	Wood.....	September.....	240
One-quarter mile south of Copemish.....	Bent, under braces.	Wood.....	September.....	40
Total.....				520

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	2	\$11,920 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	1	4,875 00
Total, - - - - -	3	\$16,795 00
Number of passenger cars—12 wheel, including official cars, - - - - -	1	2,400 00
Number of express and baggage cars, - - - - -	1	1,650 00
Number of box freight cars, - - - - -	5	1,225 00
Number of platform cars, - - - - -	100	33,750 00
Number of conductors' way cars, - - - - -	1	450 00
Other cars as follows:		
Construction, 2; hand cars, 5, - - - - -	7	380 00
Total, - - - - -	115	\$39,855 00

Number of locomotives equipped with power brakes, - - - - - 3

Number of passenger-train cars equipped with power brakes, - - - - - 2

Number of freight cars equipped with power brakes, - - - - - 2

What patterns of power brakes have you in use, and number of locomotives and cars with each? American steam brake, 2 locomotives; Westinghouse air brake, 1 locomotive and 4 cars.

Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.

What pattern or patterns have you adopted for use? McCree and the Blocker.

How are your passenger cars heated? By Spear stoves.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by passenger trains during the year, - - -	24,545
Miles run by freight trains during the year, - - -	18,780
Total mileage of trains earning revenue, - - -	43,325



*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of through passengers carried,	34		
Number of local passengers carried,	39,782		
Total number of passengers carried,	39,816		
Total passenger mileage, or passengers carried one mile,		660,333	
Average distance traveled by each passenger,			16.57
Average amount received from each passenger,	-	-	\$0 45.30
Average rate of fare per mile for local passengers,	-	-	02.73
Average rate of fare per mile for all passengers,	-	-	02.73

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of local freight carried,	117,040		
Total tons of freight carried,	117,040		
Total mileage of local freight,	-	977,846	
Total freight mileage, or tons carried one mile,		977,846	
Average ton haul for local freight,	-	-	8.35
Average ton haul for all freight,	-	-	8.35
Average amount received for each ton haul,	-	-	\$0 24.15
Average rate per ton per mile, received for local freight,	-	-	02.88
Average rate per ton per mile, received for all freight,	-	-	02.88

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	560
Flour,	29
Provisions (beef, pork, lard, etc.),	16
Other agricultural products,	10
Lumber and forest products,	116,329
Coal,	2
Plaster, lime and cement,	3
Salt,	10
Petroleum,	17
Other iron and castings,	14
Merchandise and other articles not enumerated above,	50
Total tons carried,	117,040

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain,	560	.478
Flour,	29	.024
Provisions (beef, pork, lard, etc.),	16	.013
Other agricultural products,	10	.008
Lumber and forest products,	116,329	99.4

	Tons.	Per Cent.
Coal, - - - - -	2	.001
Plaster, lime and cement, - - - - -	3	.002
Salt, - - - - -	10	.008
Petroleum, - - - - -	17	.014
Other iron and castings, - - - - -	14	.012
Merchandise and other articles not enumerated above, - - - - -	50	.040
Total tons carried, - - - - -	117,040	100.000

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

32.94 miles, Manistee to Nessen City, (main line).

2.71 miles, main line to Onkama, owned by Manistee & Northeastern R. R. Co.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

April 6, Tennis Charbornaw, laborer, Onkema Junction. Trespasser; carelessness. Company not responsible.

April 6, Michael Donnoney, laborer, Onkema Junction. Trespasser; carelessness. Company not responsible.

## INJURED.

July 4, Chas. Ackley, laborer, Manistee. Trespasser; carelessness. Company not responsible.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....						
Derailments.....						
Falling from trains.....						
Frogs.....						
Getting on and off trains.....						
Highway crossings.....						
Miscellaneous.....						
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on track.....			2			1
Total.....			2			1

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year, - - - - -	2
Number of persons injured during the year, - - - - -	1
Number of casualties purely accidental, - - - - -	—
Number resulting from lack of caution, carelessness, or misconduct, - - - - -	—

Persons killed or injured while intoxicated,	-	-	-	3
Trespassers and tramps killed or injured,	-	-	-	—
Suicides,	-	-	-	—

## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....			
Conductors.....			
Engineers.....			
Firemen.....			
Laborers.....			
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....			

STATE OF MICHIGAN, }  
COUNTY OF MANISTEE, } ss.

Edward Buckley, President and General Manager, and Wm. J. Law, Secretary and Treasurer, of the Manistee & Northeastern Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

Signed,

[L. S. OF R. R.]

EDWARD BUCKLEY.  
WM. J. LAW.

Subscribed and sworn to before me this 3d day of June, A. D. 1890.

JOHN W. SIBBEN, *Notary Public.*

ANNUAL REPORT  
OF THE  
ONTONAGON & BRULE RIVER RAILROAD COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed June 27, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President, Vacancy.*

*Vice President, ANGUS SMITH, Milwaukee, Wis.*

*Secretary, E. MARINER, Milwaukee, Wis.*

*Auditor, JOHN C. SPENCER, Milwaukee, Wis.*

*Attorney, E. MARINER, Milwaukee, Wis.*

DIRECTORS.

THOS. NESTER, Detroit, Mich.

ANGUS SMITH, Milwaukee, Wis.

E. MARINER, Milwaukee, Wis.

JAMES C. SPENCER, Milwaukee, Wis.

CHARLES F. PHISTER, Milwaukee, Wis.

CHARLES RAY, Milwaukee, Wis.

Terms expire July, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—September 10, 1880.

Number of stockholders at date of last election,	-	-	-	-	-	9
--	---	---	---	---	---	---

Number of stockholders in Michigan at same date,	-	-	-	-	-	3
--	---	---	---	---	---	---

Amount of full paid stock held in Michigan at same date,	-	-	-	-	-	None.
--	---	---	---	---	---	-------

Date of annual meeting of stockholders,—Second Thursday of July.

Fiscal year of company ends,—December 31.

General offices of the company are located at Milwaukee, Wis.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -	- - - - -	\$5,730 43
Total expenses including taxes, - - -	\$11,092 44	
Net deficit, - - - - -	\$5,362 01	
Balance for the year, - - - - -	\$5,362 01	
Balance (profit and loss) last year, -	14,999 77	
Balance forward to next year, - - -	- - - - -	\$20,361 78
	\$20,361 78	\$20,361 78

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$1,000,000 00
Par value of shares, - - - - \$100	
Amount paid in on shares not issued, -	\$491,420 00
Total amount paid in, as per books of the company, -	\$491,420 00
Paid in per mile of road owned by company,—miles, 20, - - - -	\$24,571 00

## GENERAL BALANCE SHEET.—DR.

Construction account, - - - -	\$506,500 11
Equipment account, - - - -	17,062 55
	\$523,562 66
Other assets:	
Debit balances from companies and individuals, - - - -	1,580 00
Income account, - - - -	20,361 78
Total, - - - -	\$545,504 44

## GENERAL BALANCE SHEET.—CR.

Capital stock, amount subscribed, - - -	\$491,500 00
Unfunded debt:	
Vouchers and accounts, - - - -	54,004 44
Total, - - - -	\$545,504 44

## COST OF ROAD AND EQUIPMENT.

<i>Total Cost for Construction and Equipment of Road and Branches Built by Company.</i>	
Total expended for construction and equipment, - -	\$523,562 66
Average cost per mile of road not including sidings, —20 miles, - - - -	26,178 13
Proportion of cost for Michigan, - - - -	523,562 66

The company has contracted for the construction of 26 miles of new and the thorough repair of the old road, including all station houses, shops, water tanks and turn tables, necessary to fully complete the whole line at the cost of \$884,000, payable one-half in bonds and one-half in full paid capital stock, which work is nearly completed, but no stock or bonds have been issued.

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Construction,	-	-	-	-	-	-	-	\$10,503 74
Total charges to property account as above,	-	-	-	-	-	-	-	\$10,503 74
Net addition to property account,	-	-	-	-	-	-	\$10,503 74	

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

## Main line and branches:

Total passenger fares,	-	-	-	-	\$1,691 67	
Express and baggage,	-	-	-	-	15 50	
Mails,	-	-	-	-	45 40	
Total passenger department earnings,	-	-	-	-		\$1,752 57
Proportion for Michigan,	-	-	-	-	\$1,752 57	
Per mile of road,	-	-	-	-	38 01	

## FREIGHT EARNINGS.

## Main line and branches:

Total traffic,	-	-	-	-	\$3,977 86	
Total freight department earnings,	-	-	-	-		3,977 86
Proportion for Michigan,	-	-	-	-	\$3,977 86	
Per mile of road,	-	-	-	-	198 89	
Total transportation earnings,	-	-	-	-		\$5,730 43
Transportation earnings per mile of road,	-	-	-	-	\$124 30	
Total earnings from operation of road,	-	-	-	-		5,730 43
Total earnings per mile of road,	-	-	-	-	\$124 30	
Proportion of taxable earnings for Michigan,	-	-	-	-		5,730 43
Total taxable earnings per mile of road in Michigan,	-	-	-	-	\$124 30	
Total income from all sources,	-	-	-	-		\$5,730 43
Proportion of income for Michigan,	-	-	-	-		5,730 43

## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track, - - - - -	\$1,997 09
Renewals of ties, - - - - -	701 25
Repairs of bridges, including culverts and cattle guards, - -	610 42
Repairs of fences, road crossings, and signs, - - - - -	20 24
Repairs of buildings, - - - - -	26 78
Repairs of telegraph, - - - - -	7 82
Total, - - - - -	<hr/> \$3,363 60

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives, - - - - -	\$1,789 91
Repairs of passenger cars, - - - - -	736 55
Repairs of freight cars, - - - - -	366 81
Total, - - - - -	<hr/> \$2,893 27

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	\$1,103 50
Water supply, - - - - -	141 30
Locomotive service, - - - - -	1,105 00
Passenger train service, - - - - -	204 47
Passenger train supplies, - - - - -	60 07
Freight train service, - - - - -	408 94
Freight train supplies, - - - - -	98 14
Mileage of freight cars, - - - - -	473 42
Telegraph expenses, maintenance and operating, - - -	193 31
Agents and station service, - - - - -	667 65
Station supplies, - - - - -	69 24
Total, - - - - -	<hr/> \$4,525 04

CLASS 4.—*General Expenses.*

Stationery and printing, - - - - -	\$140 45
Outside agencies and advertising, - - - - -	9 10
Contingencies, - - - - -	11 50
Taxes, - - - - -	149 48
Total, - - - - -	<hr/> \$310 53

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - -	30.33	\$3,363 60
Maintenance of motive power and cars, - -	26.09	2,893 27
Conducting transportation, - - -	40.79	4,525 04
General expenses, including taxes, - - -	2.79	310 53
Total operating expenses, and taxes, - -	100.00	<hr/> \$11,092 44

Operating expenses and taxes per mile of road, - - - - -	\$240 62	
Proportion of operating expenses and taxes for Michigan, main line, - - - - -	11,092 44	
Total proportion of expenses for Michigan, - - - - -		\$11,092 44
Percentage of expenses to earnings, 193.5%.		
Net deficit per mile of road, - - - - -	\$116 32	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Ontonagon to end of first 20 miles, August 14, 1882.

From end of first 20 miles to Sidnaw, October, 1889.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Ontonagon to Sidnaw, - - -	46.10	
Total length completed, - - - - -		46.10
Total length of road belonging to this company, - - -		46.10
Total length of road belonging to this company in Michigan, - - - - -	46.10	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated, - - -	1.50	
Aggregate length of tracks in Michigan belonging to this company computed as single track, - - -		47.60
Gauge of track, 4 feet, 8½ inches.		
Total miles operated by the company, - - - - -	46.10	46.10

*Number of Bridges and Trestles in Michigan.*

Wooden trestles, number of 25; aggregate length, feet,	5,058
Total, - - - - - 25; - - - - -	5,058

*Crossings—Railroad and Highway.*

Number of crossings of highways at grade in this State,	8
Number of crossings of highways at grade in this State at which there are gates or flagmen, - - - - -	None.

*Stations.*

Number of stations on whole line, - - - - -	6
Same in Michigan, - - - - -	6

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials, - - - - -	35
Same in Michigan, - - - - -	35



Classify your employés as per following list:

	Number.
Baggagemen, - - - - -	1
Brakemen, - - - - -	1
Conductors, - - - - -	1
Engineers, - - - - -	1
Firemen, - - - - -	1
Laborers, - - - - -	23
Others, - - - - -	7

#### REPAIRS AND RENEWALS.

##### *Fencing in Michigan.*

How many miles of fencing have you? - - - - -	10
Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed:	
Houghton and Ontonagon, - - - - -	82
Total miles required, - - - - -	82

##### *Road Bed and Track.*

Number of track sections in Michigan, - - - - -	6
Average length of sections,—miles, - - - - -	7.66
Average number of men in each section gang, - - - - -	4

#### ROLLING STOCK.

Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	1
Total, - - - - -	1
Number of passenger cars—8-wheel, including official cars, - - - - -	1
Number of box freight cars, - - - - -	2
Number of platform cars, - - - - -	15
Other cars, - - - - -	1
Total, - - - - -	19

#### ADDITIONAL QUESTIONS.

##### *Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

American Express Company handle express business on this line, paying \$25 per month for the privilege. R. R. Co. takes the freight to depots.

##### *Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

46 miles of line owned jointly by the railroad and Western Union Telegraph Company.

STATE OF WISCONSIN, }  
COUNTY OF MILWAUKEE, } ss.

E. Mariner, Secretary, of the Ontonagon & Brule River Railroad Company, being duly sworn, deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

E. MARINER.

Subscribed and sworn to before me this 24th day of June, A. D. 1890.

PHILIP D. KENNEDY, *Notary Public.*

ANNUAL REPORT  
OF THE  
WISCONSIN CENTRAL COMPANY.

*For the Year Ending December 31, 1889.*

[Filed June 27, 1890.]

### OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President and Treasurer, CHAS. L. COLLEY, Milwaukee, Wis.*

**Vice President, EDWIN H. ABBOT, Milwaukee, Wis.**

**Secretary, HOWARD MORRIS, Milwaukee, Wis.**

**Auditor, T. J. HYMAN, Milwaukee, Wis.**

**General Manager, S. R. AINSLIE, Milwaukee, Wis.**

**General Superintendent, G. CAMPBELL, Milwaukee, Wis.**

**Division Superintendents, E. R. KNOWLTON, Waukesha, Wis.**

**M. B. CUTLER, Waukesha, Wis.**

A. R. HORN, St. Paul, Minn.

**Chief Engineer, F. W. FRATT, Milwaukee, Wis.**

**Cashier, R. W. McGUIRE, Milwaukee, Wis.**

**Asst. General Passenger Agent, L. ECKSTEIN, Milwaukee, Wis.**

**Asst. General Freight Agent, J. B. CAVANAUGH, Wilwaukee, Wis.**

**Attorney, D. S. WEGG, Milwaukee, Wis.**

## DIRECTORS.

CHAS. L. COLLEY, Milwaukee, Wis.

EDWIN H. ABBOT, Milwaukee, Wis.

DAVID S. WEGG, Milwaukee, Wis.

HOWARD MORRIS, Milwaukee, Wis.

FREDK. ABBOT, Milwaukee, Wis.

**FREDK. N. FINNEY, Milwaukee, Wis.**

S. R. AINSLIE, Milwaukee, Wis.

H. C. BARLOW, Milwaukee, Wis.

**T. J. HYMAN, Milwaukee, Wis.**

COLGATE HOYT, New York, N. Y.

CHAS. H. ROPES, New York, N. Y.

**Terms expire at annual election.**

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed.—June 17, 1887.

Number of stockholders at date of last election,	-	-	-	-	-	-	-	11
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Number of stockholders in Michigan at same date, - - - - - None.

Amount of full paid stock held in Michigan at same date, - - - - None.  
 Date of annual meeting of stockholders,—First Wednesday in November.  
 Fiscal year of company ends,—June 30.  
 General offices of the company are located at Milwaukee, Wis. •

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GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - -		\$2,013,095 13
Total expenses, including taxes, - - -	\$1,374,484 98	
Net income, - - -		638,610 15
Interest on funded debt, - - -	\$580,655 77	
Interest on unfunded debt, - - -	151,210 23	
Rentals of buildings, tracks, etc., - - -	554,107 00	
Rentals of engines and cars, - - -	52,283 93	
Balance for the year, - - -	\$397,226 32	
Balance (profit and loss) last year, - - -	138,178 80	
Discount and premium on bond exchanges and sales, - - -		\$346,288 20
Balance forward to next year, - - -		189,116 92
	\$535,405 12	\$535,405 12

ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$15,000,000 00
Par value of shares, - - -	\$100 00
No. of shares issued, - - -	144,145.04
Amount paid in on common, - - -	\$11,787,100 00
Amount paid in on preferred, - - -	2,627,404 00
Total amount paid in as per books of the company, -	14,414,504 00

Paid in per mile of road owned by company. See note.

NOTE.—The number of miles of road owned by the Wisconsin Central Company is 226.96. The stock and bonds of the Wisconsin Central Company, however, have been issued in exchange for the securities of other companies with the following mileage: The Wisconsin Central Railroad Company with 352.84 miles, and the Packwaukee & Montello Railroad Company with 7.84 miles. All the securities of these two companies have not yet been exchanged for Wisconsin Central Company securities and the roads belonging to these companies have not yet been deeded to the Wisconsin Central Company. Any figures, therefore, that could be given in reply to questions relative to mileage would be misleading.

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character, and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount Outstanding.
W. C. Company 1st mortgage bonds.....	5%	July 1, 1937.....	New York.....	\$9,662,811 71
W. C. Company income bonds.....	If earned.	July 1, 1937.....	New York.....	6,604,166 67
M., St. C. & W. railroad 1st mortgage bonds.....	6%	May 1, 1915.....	New York.....	200,000 00
M., St. C. & W. railroad terminal m't'g notes.....	8%	Dec. 29, 1894.....	New York.....	400,000 00
M., St. C. & W., Minn. tr. pur. money notes.....	8%	Aug. 1, 1891.....	New York.....	70,000 00
M., St. C. & W. imp. pur. money m't'g notes.....	8%	Sept. 1, 1906.....	New York.....	215,000 00
Chippewa Falls & Western, 1st m't'g bonds.....	7%	Sept. 1, 1904.....	New York.....	150,000 00
Wis. & Minn. railroad, 1st mortgage bonds.....	7%	Oct. 1, 1910.....	New York.....	810,000 00
Penokee railroad, 1st mortgage bonds.....	5%	Oct. 1, 1937.....	New York.....	63,000 00
St. P. & St. C. Falls, 1st mortgage bonds.....	6%	Nov. 1, 1891.....	New York.....	90,000 00
W. C. Company spur notes.....	5%	June 19, 1890.....	New York.....	127,000 00
Total funded debt.....				\$18,391,978 38

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For construction.....	.....	.....
For equipment.....	.....	.....
For real estate.....	.....	.....
For interest on bonds.....	.....	.....
For miscellaneous.....	.....	\$1,338,185 24
For current balances.....	.....	679,235 14
Total unfunded debt.....		\$2,067,370 38

## RECAPITULATION.

Total funded debt,	-	-	-	-	-	-	\$18,391,978 38
Total unfunded debt,	-	-	-	-	-	-	2,067,370 38
Total debt liabilities,	-	-	-	-	-	-	\$20,459,348 76

Amount of debt liabilities per mile of road. Not reported.

Total amount of stock and debt, - - - - - 34,873,852 76

Stock and debt per mile of road. Not reported.

## GENERAL BALANCE SHEET.—Dr.

Construction and equipment account,	-	-	-	-	\$14,306,863 57
Other investments:					
Upham granite lands and railroad,	-	\$100,000 00			
Securities of other companies owned and accrued interest on same,	-	19,025,106 81			19,125,106 81
Cash items:					
Cash,	-	\$561,686 07			
Due from agents and conductors,	-	171,287 66			732,973 73

## Other assets:

Materials and supplies, - - -	\$312,137 48	
Sinking funds, - - - - -	14,916 94	
Debit balances from companies and individuals, - - - - -	181,933 88	
Insurance and premium unearned, - - -	10,803 43	
		\$519,791 73
Profit and loss or income accounts, - - - - -		189,116 92
		<hr/>
Total, - - - - -		\$34,873,852 76

## GENERAL BALANCE SHEET.—Cr.

Capital stock, - - - - -	\$14,414,504 00	
Funded debt, - - - - -	18,391,978 38	
		\$32,806,482 38
		<hr/>
Unfunded debt:		
Interest unpaid, - - - - -	\$294,264 99	
Notes payable, - - - - -	1,093,870 25	
Vouchers and accounts, - - - - -	679,235 14	
		2,067,370 38
		<hr/>
Total, - - - - -		\$34,873,852 76

*Purchased by Present Company.*

When purchased,—July 1, 1888.

Original cost to present company, of road and equipment,	\$13,790,446 64	
Amount expended since purchase, account of construction, }	516,416 93	
Amount expended since purchase, account of equipment, - }		
		<hr/>
Total cost to date of report, - - - - -	\$14,306,863 57	
Average cost per mile of road, not including sidings,		
226.96 miles, - - - - -	63,036 94	
Proportion of cost for Michigan,—13.74 miles, - - -	865,565 25	

NOTE.—That portion of railway operated by the Wisconsin Central Company which lies in the State of Michigan was constructed by the Gogebic and Montreal River Railroad Company, a corporation under the laws of said State, and was built under a contract whereby all the stock amounting to \$390,000, and all the bonds, amounting to \$390,000, of the Gogebic and Montreal River Railroad Company, were issued to the contractors. When the Wisconsin Central Company became the owner of the Penokee Railroad, it issued to the holders of a like amount of Penokee Railroad Company bonds and stock, its own in lieu thereof; so that, under the ordinarily accepted rules of accounting adopted by accounting officers of railroad companies, the cost of that portion of the line which lies in Michigan amounted to \$780,000, plus that portion of the construction account of the Penokee railroad which included the Gogebic and Montreal River railroad, and which, upon a mileage basis, amounts to \$865,565.25.

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings, - - - - -	\$52,429 80	
Bridges, - - - - -	677 81	
New buildings, - - - - -	2,469 52	
New fences, - - - - -	887 06	
Machinery and tools, - - - - -	1,390 85	
Air brakes, - - - - -	5,388 81	
	<hr/>	
Total charges to property account as above,	\$63,243 85	\$63,243 85
Property sold and credited, - - - - -	145 25	
	<hr/>	
Net addition to property account, - - - - -		63,098 60

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Total passenger fares, - - - - -	\$515,249 76	
Express and baggage, - - - - -	43,063 32	
Mails, - - - - -	31,459 76	
Other sources, - - - - -	29,238 39	
	<hr/>	
Total passenger department earnings, - - - - -		\$619,011 23
Proportion for Michigan, - - - - -	\$24,553 87	
Per train mile, - - - - -	74.77	
Per mile of road, - - - - -	1,787 04	

## FREIGHT EARNINGS.

Total traffic, - - - - -	\$1,376,759 92	
Other sources, - - - - -	10,600 29	
	<hr/>	
Total freight department earnings, - - - - -		1,387,360 21
Proportion for Michigan, - - - - -	\$55,031 41	
Per train mile, - - - - -	1 59	
Per mile of road, - - - - -	4,005 21	
	<hr/>	
Total transportation earnings, - - - - -		\$2,006,371 44
Transportation earnings per mile of road, - - - - -	\$5,792 24	
Transportation earnings per train mile, - - - - -	1 18	
Miscellaneous receipts from operating account, other than for transportation, as follows:		
*From rentals of tracks or terminals, - - - - -		6,723 69
	<hr/>	
Total earnings from operation of road, - - - - -		\$2,013,095 13
Total earnings per mile of road,—346.39 miles, - - - - -	\$5,811 61	
Total earnings per train mile, - - - - -	1 13	
Proportion of taxable earnings for Michigan, - - - - -	80,548 02	
Total taxable earnings per mile of road in Michigan,—13.74 miles, - - - - -	5,862 30	

\* Of this amount \$6,201.87 is subject to local taxation. No portion of these earnings in Michigan.

Interest and exchange, - - - - -	\$151,121 03
Discount and premium on bond exchanges and sales, - - - - -	346,288 20

Total income from all sources, - - - - -	\$2,510,504 36
Proportion of income for Michigan, - - - - -	80,548 02

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track, - - - - -	\$142,010 78
Renewals of rails, - - - - -	2,928 30
Renewals of ties, - - - - -	34,964 76
Repairs of bridges, including culverts and cattle guards, - - - - -	20,187 71
Repairs of fences, road crossings, and signs, - - - - -	5,002 01
Repairs of buildings, - - - - -	22,249 44
Total, - - - - -	\$227,343 00

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives, - - - - -	\$69,504 91
Repairs of passenger cars, - - - - -	42,696 13
Repairs of freight cars, - - - - -	80,800 92
Total, - - - - -	\$193,001 96

## CLASS 3.—Conducting Transportation.

Fuel for locomotives, - - - - -	\$161,070 91
Water supply, - - - - -	9,008 94
Oil and waste, - - - - -	12,684 00
Locomotive service, - - - - -	137,201 05
Passenger train service, - - - - -	35,283 16
Passenger train supplies, - - - - -	10,646 93
Mileage of passenger cars, - - - - -	1,133 16
Freight train service, - - - - -	62,538 35
Freight train supplies, - - - - -	1,070 14
Mileage of freight cars, - - - - - (credit,)	24,271 19
Telegraph expenses (maintenance and operating), - - - - -	29,945 15
Damage and loss of freight and baggage, - - - - -	6,049 45
Damages to property and cattle, - - - - -	4,649 31
Personal injuries, - - - - -	8,413 59
Agents and station service, - - - - -	234,385 37
Station supplies, - - - - -	6,602 60
Total, - - - - -	\$696,410 92

## CLASS 4.—General Expenses.

Salaries of the general officers of the company, - - - - -	\$45,087 34
Salaries of clerks in general offices, - - - - -	32,361 64
Law expenses, - - - - -	894 29
Insurance, - - - - -	6,283 51



Stationery and printing, - - - - -	\$16,254 91
Outside agencies and advertising, - - - - -	50,015 43
Contingencies, - - - - -	44,782 81
Taxes, - - - - -	62,049 17
Total, - - - - -	<u>\$257,729 10</u>

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - -	16.54	\$227,343 00
Maintenance of motive power and cars, - - -	14.04	193,001 96
Conducting transportation, - - -	50.67	696,410 92
General expenses, including taxes, - - -	18.75	257,729 10
Total operating expenses, and taxes, - - -	100.00	<u>\$1,374,484 98</u>
Operating expenses and taxes per mile of road, —346.39 miles, - - -	\$3,968 02	
Operating expenses and taxes per train mile run, for trains earning revenue,—1,696.881 miles, - - -	81	
Proportion of operating expenses for Michigan, main line, taxes deducted from operating expenses, - - -	54,520 59	
Total, proportion of expenses for Michigan, - - -		<u>\$54,520 59</u>
Percentage of expenses to earnings,—68%.		
Net earnings per mile of road - - -	\$1,843 59	
Net earnings per train mile, - - -	37	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Ironwood (State line) to Bessemer, June 6, 1887.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from State line to Bessemer, - - -	6.86	
In Wisconsin, main line, - - -	174.44	
In Minnesota, - - -	23.97	
Total length completed, - - -		<u>205.27</u>

## BRANCHES.

Michigan, additional track, - - -	6.88	
Wisconsin, additional track, - - -	13.16	
Minnesota, additional track, - - -	1.65	
Total length of branches owned by company, - - -		<u>21.69</u>
Total length of branches owned by company in Michigan, - - -	6.88	
Total length of road belonging to this company, - - -		<u>226.96</u>

Total length of road belonging to this company in Michigan,	13.74	
Aggregate length in Michigan of sidings, spurs, and other tracks not above enumerated,	5.07	
Aggregate length of tracks in Michigan belonging to this company computed as single track,		18.81
Gauge of track, 4 feet 8½ inches.		

*Proprietary or Leased Roads Operated by this Company.*

Name, description, and length of each:	Total Miles.	In Michigan.
Chicago, Wisconsin & Minnesota railroad,	111.59	
Branches and additional track,	7.84	
Total,	119.43	
Total miles operated by the company,	346.29	13.74

*Number of Bridges and Trestles in Michigan.*

Wooden bridges, number of,	4;	aggregate length, feet,	358.5
Wooden trestles, number of,	6;	aggregate length, feet,	3,069.0
Total,	10;		3,427.5

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Valley Mine Spur, M. L. S. & W. railroad near Bessemer.

Cross Colby Mine Spur, Wisconsin Central Railroad Company at Bessemer.

Anvil Mine Spur, M. L. S. & W. railway near Bessemer.

Cross Palms Mine, Spur Wisconsin Central Company at Bessemer.

What railroads cross your road either over or under your grade in this State, and where?

Under,—

M. L. S. & W. Railway at Ironwood, Siemens and Bessemer.

D. S. S. & A. Railroad near Bessemer.

At what crossings are interlocking and derailling switches in operation?

None.

Number of crossings of highways at grade in this State, 5

Number of crossings of highways at grade in this State at which there are gates or flagmen, 1

Number of crossings of highways over or under railroad, 1

Over,—0, under,—1,

Are your frogs and guard rails blocked as required by act 174, session laws of 1883, Yes.

How are they treated? Filled in with wooden blocks.

*Stations.*

Number of stations on whole line,	175
Same in Michigan,	3

*Employés.*

Number of persons regularly employed on all roads operated  
by company, including officials, - - - - - 2,860

Same in Michigan, - - - - - 116

Classify your employees as per following list:

	Number.
Baggagemen, - - - - -	} 187
Brakemen, - - - - -	
Conductors, - - - - -	85
Engineers, - - - - -	148
Fireman, - - - - -	140
Laborers, - - - - -	475
Shopmen, - - - - -	479
Yardmen, - - - - -	146
Others, - - - - -	1,200

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - - 3.38

Give the number of miles required to complete fence both sides of your  
track, in Michigan, and the counties in which needed:

Gogebic, - - - - - 3.17

The line is parallel with and joins the right of way of the M., L. S. &  
W. railway from Ironwood to Siemens and between which points 3.73  
miles of fencing is only required on one side.

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	2
Average length of sections,—miles, - - - - -	6.87
Average number of men in each section gang, - - - - -	7
Number of new ties put in whole line during the year, - - - - -	148,332
Number of new ties put in track in Michigan, - - - - -	60,222
Average number of new ties per mile of road, - - - - -	4,379

New rails put in track:

Steel, tons 13, feet 1,456.

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	40	Not reported.
Total, - - - - -	40	
Number of passenger cars—8 wheel, including official cars, - - - - -	22	
Number of express and baggage cars, - - - - -	9	
Number of box freight cars, - - - - -	552	

	Number.	Present Estimated Value.
Number of stock cars, - - - - -	99	
Number of platform cars, - - - - -	197	
Number of ore cars, - - - - -	789	
Number of conductors' way cars, - - - - -	25	
Other cars, drop bottom gondolas, - - - - -	15	
Total, - - - - -	1,708	Not reported.
Number of locomotives equipped with power brakes, - - - - -	40	
Number of passenger-train cars equipped with power brakes, - - - - -	31	
What patterns of power brakes have you in use, and number of locomotives and cars with each? Westinghouse air brake 37 locomotives and 31 cars; steam brake 3 locomotives.		
Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? Yes.		
What pattern or patterns have you adopted for use? Janney-Hein.		
How are your passenger cars heated? With coal stoves.		

## MILEAGE, TRAFFIC, ETC.

## WHOLE LINE.

*Train Mileage.*

Miles run by passenger trains during the year, - - -	827,836
Miles run by freight trains during the year, - - -	869,045
Total mileage of trains earning revenue, - - -	1,696,881

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dols. Cents.
Total number of passengers carried, 1,169,961			
Total passenger mileage, or passengers carried one mile, - - - - -	51,449,644		
Average distance traveled by each passenger, - - -	43.98		
Average amount received from each passenger, - - -			\$0 90.70
Average rate of fare per mile for all passengers, - - -			02.06

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Total tons of freight carried, 2,142,503			
Total freight mileage, or tons carried one mile, - - -	282,613,841		
Average ton haul for all freight, - - - - -	131.91		
Average amount received for each ton haul, - - -			\$1 37
Average rate per ton per mile, received for all freight, - - -			01.039

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain, - - - - -	77
Flour, - - - - -	29
Provisions (beef, pork, lard, etc.), - - - - -	26
Animals, - - - - -	1
Other agricultural products, - - - - -	131
Lumber and forest products, - - - - -	7,032
Coal, - - - - -	1,113
Plaster, lime and cement, - - - - -	31
Petroleum, - - - - -	1
Other iron and castings, - - - - -	40
Ores, - - - - -	175,574
Stone, brick and sand, - - - - -	1,772
Merchandise and other articles not enumerated above, - - - - -	2,295
<b>Total forwarded,</b> - - - - -	<b>188,122</b>

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain, - - - - -	43,401	2.03
Flour, - - - - -	34,134	1.58
Provisions (beef, pork, lard, etc.), - - - - -	7,291	.34
Animals, - - - - -	20,633	.96
Other agricultural products, - - - - -	91,831	4.29
Lumber and forest products, - - - - -	404,028	18.86
Coal, - - - - -	68,888	3.22
Plaster, lime and cement, - - - - -	27,779	1.29
Salt, - - - - -	2,968	.14
Petroleum, - - - - -	27,544	1.28
Railroad iron, iron and steel rails, - - - - -	26,672	1.25
Pig and bloom iron, - - - - -	10,386	.49
Other iron and castings, - - - - -	55,954	2.61
Ores, - - - - -	801,787	37.42
Stone, brick and sand, - - - - -	36,362	1.70
Merchandise and other articles not enumerated above, - - - - -	482,845	22.54
<b>Total tons carried,</b> - - - - -	<b>2,142,503</b>	<b>100.00</b>

**ADDITIONAL QUESTIONS.***Express Companies.*

What express companies run on your road, and on what terms and what conditions as to rates, etc.; what kind of business is done by them, and do you take their freights at the depot, or at the office of such express companies?

The Northern Pacific Express Company; it pays to this company all net earnings over and above its expenses of operating on this company's line; a general express business; at the office of the express company, which is in the majority of cases in this company's depots.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
881.37 miles, belongs to Western Union Telegraph Co.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

Killed, - - - - - None.

## INJURED.

January 26, Marshall Brooks, Ironwood. Fell on log with side.  
May 12, Frederick McConnell, Ironwood. Caught his foot between draw bar and deadwood.  
July 31, Michael Cain, Bessemer. Coupling.  
September 27, Joseph Bliceck, Ironwood. Fell from car.  
October 17, M. J. Mordaunt, Bessemer. Coupling.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....					3	
Derailments.....					1	
Falling from trains.....					1	
Frogs.....						
Getting on and off trains.....						
Highway crossings.....						
Miscellaneous.....					1	1
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on tracks.....						
Total.....					4	1

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	- - -	—
Number of persons injured during the year,	- - -	5
Number of casualties purely accidental,	- - -	—
Number resulting from lack of caution, carelessness, or misconduct,	- - -	5
Persons killed or injured while intoxicated,	- - -	—
Trespassers and tramps killed or injured,	- - -	—
Suicides,	- - -	—

## CLASSIFICATION OF EMPLOYEES.

## KILLED OR INJURED IN MICHIGAN.

Employee.	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....			
Conductors.....			
Engineers.....			
Firemen.....		1	1
Laborers.....			
Shopmen.....		3	3
Yardmen.....			
Not classified above.....			
Total.....		4	4

STATE OF WISCONSIN, }  
COUNTY OF MILWAUKEE, } ss.

Thos. J. Hyman, Auditor, and Howard Morris Secretary, of the Wisconsin Central Company, being duly sworn depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.] Signed,

T. J. HYMAN,  
HOWARD MORRIS.

Subscribed and sworn to before me this 24th day of June, A. D. 1890.

WM. SHINEMELL, *Notary Public.*





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DEPOT AND STATION COMPANIES.

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ANNUAL REPORT  
OF THE  
DETROIT UNION R. R. DEPOT & STATION COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed June 7, 1890.]

NAMES AND RESIDENCES OF OFFICERS OF THE COMPANY.

*President*, JAMES F. JOY, Detroit, Mich.  
*Vice President*, JAMES McMILLAN, Detroit, Mich.  
*Secretary*, JAMES G. MILLER, Detroit, Mich.  
*Treasurer*, JAMES F. JOY, Detroit, Mich.

ORGANIZATION, ETC.

When chartered or articles of association filed,—About June 1, 1881.  
Number of stockholders at date of last election, - - - - - 16  
Number of stockholders in Michigan at same date, . - - - - 15  
Date of annual meeting of stockholders,—On first Wednesday in February.  
General offices of the company are located at Detroit, Michigan.

CAPITAL STOCK.

By Whom Subscribed.	Residence.	Number of Shares.	Amount.
James F. Joy.....	Detroit, Michigan.....	1,666 $\frac{2}{3}$	\$166,667 00
C. H. Buhl.....	Detroit, Michigan.....	1,666 $\frac{2}{3}$	166,667 00
Allen Shelden.....	Detroit, Michigan.....	1,666 $\frac{2}{3}$	166,667 00
James McMillan.....	Detroit, Michigan.....	1,250	125,000 00
John B. Newberry.....	Detroit, Michigan.....	1,250	125,000 00
M. S. Smith.....	Detroit, Michigan.....	833 $\frac{1}{3}$	83,333 00
G. W. Balch.....	Detroit, Michigan.....	833 $\frac{1}{3}$	83,333 00
Total.....		10,000	\$1,000,000 00

## STOCKHOLDERS, DECEMBER 31, 1889.

Names.	Residence.	Amount Held.
James F. Joy.....	Detroit, Michigan.....	\$500,000 00
C. H. Buhl.....	Detroit, Michigan.....	267,000 00
Caroline Buhl.....	Detroit, Michigan.....	10,000 00
Theodore D. Buhl.....	Detroit, Michigan.....	10,000 00
Frank H. Buhl.....	Sharon, Pennsylvania.....	10,000 00
George W. Balch.....	Detroit, Michigan.....	19,200 00
James Joy.....	Detroit, Michigan.....	12,500 00
James Joy, trustee.....	Detroit, Michigan.....	12,500 00
Frederick Joy.....	Detroit, Michigan.....	12,500 00
Henry B. Joy.....	Detroit, Michigan.....	12,500 00
James McMillan.....	Detroit, Michigan.....	206,200 00
Helen H. Newberry.....	Detroit, Michigan.....	41,200 00
Helen H. Newberry, executrix.....	Detroit, Michigan.....	41,300 00
Helen H. Newberry, trustee.....	Detroit, Michigan.....	82,500 00
Treuman H. Newberry.....	Detroit, Michigan.....	41,300 00
Allen Shelden.....	Detroit, Michigan.....	\$71,300 00
Total.....		\$1,650,000 00

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	When Payable.	Amount.
First mortgage bonds.....	4%	Jan. 1, and July 1....	1938.....	\$600,000 00
Total funded debt.....				\$600,000 00

## UNFUNDED DEBT.

There is no unfunded debt. The following is a statement of the stock and funded debt.

For capital stock of the company, - - - - \$1,650,000 00  
 For land used as right of way on rent of 5% on \$8,000, - - - - 8,000 00

Total stock and debt, - - - - \$1,658,000 00

The debt formerly reported as due Connecticut Mutual Life Insurance Company, has been all paid, the balance of \$550,000 was paid in 1889.

## RECAPITULATION.

Total funded debt, first mortgage bonds, - - - - \$600,000 00  
 Total debt, being stock, and value of rented land as above, - - - - 1,658,000 00  
 Total indebtedness, - - - - \$2,258,000 00  
 Total stock and debt, as above stated, - - - - \$2,258,000 00

## COST.

Of real estate, including right of way, - - - -	\$1,300,089 00
Of depot buildings and fixtures, - - - -	62,196 00
Of elevators and belongings, - - - -	303,595 00
Of all other property, - - - -	584,120 00
Total cost, - - - -	<u>\$2,250,000 00</u>

## CASH PAID TO CORPORATION.

On account of original capital stock, - - - -	\$1,000,000 00
On account of increase of capital stock, - - - -	650,000 00
On other accounts, other than for income account, first mortgage bonds, less discount, - - - -	600,000 00
Total cash paid, - - - -	<u>\$2,250,000 00</u>

## TRACK.

Length of single main track—miles, - - - -	3.34
Length of sidings and other tracks—miles, - - - -	3.50
Total track, - - - -	<u>6.84</u>

## ANALYSIS OF EARNINGS AND EXPENSES.

## EARNINGS.

From rentals, - - - -	\$80,767 72
From all other sources, - - - -	46,984 99
Total earnings, - - - -	<u>\$127,752 71</u>

## EXPENSES.

*Operating.*

Salaries of officers and clerks, - - - -	\$2,000 00
Management and maintenance, - - - -	21,738 69
Taxes, - - - -	4,887 55
Miscellaneous, including expenses, repairs and insurance, - - - -	11,920 63
Total, - - - -	<u>\$40,546 87</u>

## RECAPITULATION.

Expenses for operating and taxes, - - - -	\$28,626 24
Expenses for property account, and expenses, as above stated, - - - -	11,920 63
Total expenses for the year, - - - -	<u>\$40,546 87</u>

## ADDITIONAL INTERROGATORIES.

*Description and Character of Buildings and Other Property.*

Passenger houses, brick, number, - - - - -	1
Passenger houses, wood, number, - - - - -	None.
Freight houses, brick, number, - - - - -	1
Freight houses, wood, number, - - - - -	None.
Engine or roundhouses, number, - - - - -	None.
Sheds, freight, brick, number, - - - - -	1
Sheds, fuel, number, - - - - -	None.
Water tanks, number, - - - - -	None.
Water front and docks, feet, about, - - - - -	2,500

*Street Crossings, Etc.*

At grade, number, - - - - -	19
With flagmen, number, - - - - -	6
Over or under grade, number, - - - - -	None.
Overhead bridges, number, - - - - -	None.
Frogs and guard rails, are they blocked as required by law?	Yes.

*Contracts and Leases.*

What railroad companies have rented terminal privileges from you during the year and on what terms?

The Wabash Railroad Company pays 7% interest on the cost of the property occupied by that company under lease dated, A. D. 1881.

Also under a joint agreement the Detroit, Lansing & Northern and Flint & Pere Marquette Railroad Companies pay as rental \$30,000 per annum for the premises and facilities which those companies will use belonging to this company, lease made during 1889. Rent to begin from July 1, 1889, and is the amount above stated.

## VERIFICATION.

STATE OF MICHIGAN, }  
COUNTY OF WAYNE, } ss.

James F. Joy, President, and James G. Miller, Secretary of the Detroit Union Railroad Depot & Station Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of the company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the 31st day of December, A. D. 1889, to the best of their knowledge and belief.

[L. s.]

Signed,

JAMES F. JOY.

JAMES G. MILLER.

Subscribed and sworn to before me this 5th day of June, A. D. 1890.

G. H. STALKER, Notary Public.

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# ORE AND FOREST ROADS.

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ANNUAL REPORT  
OF THE  
CRAWFORD & MANISTEE RIVER RAILWAY COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed March 8, 1890.]

• OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, A. E. CARTIER, Ludington, Mich.  
*Vice President*, JAMES DEMPSEY, Manistee, Mich.  
*Secretary and Auditor*, WM. WENTE, Manistee, Mich.  
*Treasurer*, L. T. DEMPSEY, Manistee, Mich.  
*General Manager, Superintendent and General Freight Agent*,  
N. DOWEN, Fletcher, Mich.

DIRECTORS.

L. T. DEMPSEY, Manistee, Mich.  
Term expires January 1, 1891.  
WM. WENTE, Manistee, Mich.  
Term expires January 1, 1892.  
ALLEN McKEE, Manistee, Mich.  
Term expires January 1, 1893.  
A. E. CARTIER, Ludington, Mich.  
Term expires January 1, 1894.  
JAMES DEMPSEY, Manistee, Mich.  
Term expires January 1, 1895.

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

When chartered or articles of association filed,—September 28, 1885.  
Number of stockholders at date of last election, - - - - - 7  
Number of stockholders in Michigan at same date, - - - - - 7  
Amount of full paid stock held in Michigan at same date, - - - \$50,000 00  
Date of annual meeting of stockholders,—First Tuesday in December of each year.  
Fiscal year of company ends,—December 31.  
General offices of the company are located at Manistee, Mich.

GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$14,735 86
Total expenses, including taxes, - - -	\$14,537 71	

	DEBIT.	CREDIT.
Net income, - - - - -		\$198 15
Balance for the year, - - - - -		\$198 15
Balance (profit and loss) last year, - - - - -		7,184 76
Balance forward to next year, - - - - -	\$7,382 91	
	\$7,382 91	\$7,382 91

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$50,000 00
Par value of shares, - - - \$100 00	
Number of shares issued, - - - 500	
Amount paid in on common, - - - - -	\$50,000 00
Total amount as per books of the company, - - - - -	50,000 00
Per mile of road owned by company, - - - - -	
—10 miles, - - - - -	\$5,000 00

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt, - - - - -	None.
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## UNFUNDED DEBT.

Unfunded debt, - - - - -	None.
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## RECAPITULATION.

Total amount of stock and debt, - - - - -	\$50,000 00
Stock and debt per mile of road,—10 miles, - - - - -	5,000 00

## GENERAL BALANCE SHEET.—Dr.

Construction account, - - - - -	\$45,566 58
Equipment account, - - - - -	11,618 18
	\$57,184 76
Other assets:	
Debit balances from companies and individuals, - - - - -	198 15
Total, - - - - -	\$57,382 91

## GENERAL BALANCE SHEET.—Cr.

Capital stock, - - - - -	\$50,000 00
Profit and loss or income accounts, - - - - -	7,382 91
Total, - - - - -	\$57,382 91

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment, - - -	\$57,184 76
Average cost per mile of road, not including sidings,—10 miles, - - -	5,718 48
Proportion of cost for Michigan, - - -	57,184 76

## ANALYSIS OF EARNINGS.

## FREIGHT EARNINGS.

Local traffic, - - -	\$14,735 86	
Total traffic, - - -	\$14,735 86	
Total freight department earnings, - - -		\$14,735 86
Proportion for Michigan, - - -	\$14,735 86	
Per train mile, - - -	1 54.66	
Per mile of road, - - -	1,473 59	
Total transportation earnings, - - -		\$14,735 86
Transportation earnings per mile of road, -	\$1,473 59	
Transportation earnings per train mile, -	1 54.66	
Total earnings from operation of road, - - -		\$14,735 86
Total earnings per mile of road, - - -	\$1,473 59	
Total earnings per train mile, - - -	1 54.66	
Proportion of taxable earnings for Michigan, -	14,735 86	
Total taxable earnings per mile of road in Michigan, - - -	1,473 59	
Total income from all sources, - - -		\$14,735 86
Proportion of income for Michigan, - - -		14,735 86

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track, - - -	\$1,584 18
Renewals of rails, - - -	} 5,936 34
Renewals of ties, - - -	
Total, - - -	\$7,520 52

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives, - - -	} \$2,170 51
Repairs of freight cars, - - -	
Total, - - -	\$2,170 51

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives,	-	-	-	-	-	-	-	}	\$1,078 49
Water supply,	-	-	-	-	-	-	-		337 55
Oil and waste,	-	-	-	-	-	-	-		2,710 90
Freight train service,	-	-	-	-	-	-	-		
Total,	-	-	-	-	-	-	-		\$4,126 94

CLASS 4.—*General Expenses.*

Salaries of clerks in general offices,	-	-	-	-	-	-	-	\$477 72
Taxes,	-	-	-	-	-	-	-	242 02
Total,	-	-	-	-	-	-	-	\$719 74

## RECAPITULATION OF EXPENSES.

		Per cent of Expenses.	
Maintenance of way and buildings,	-	52	\$7,520 52
Maintenance of motive power and cars,	-	15	2,170 51
Conducting transportation,	-	29	4,126 94
General expenses, including taxes,	-	4	719 74
Total operating expenses and taxes,	-	100	\$14,537 71
Operating expenses and taxes per mile of road,	\$1,453 77		
Operating expenses and taxes per train mile run, for trains earning revenue,—9,520 miles,	1 54.66		
Proportion of operating expenses and taxes for Michigan, main line,	14,537 71		
Total proportion of expenses for Michigan,	-	-	\$14,537 71
Percentage of expenses to earnings,—98.66%.			
Net earnings per mile of road,	\$19 81		
Net earnings per train mile,	0 28		

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Manistee river to forest terminal, east and south, October 11, 1885.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Manistee river to forest terminal, east and south,	-	10.00
Total length completed,	-	10.00

## BRANCHES.

Total length of branches owned by company,	-	3.00
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	Miles. 100ths.	Miles. 100ths.
Total length of branches owned by company in Michigan, - - - - -	3.00	

Total length of road belonging to this company, - - -	13.00
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Total length of road belonging to this company in Michigan, - - - - -	13.00
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Aggregate length of tracks in Michigan belong- ing to this company, computed as single track, - - -	13.00
--	-------

Gauge of track, 3 feet.

*Crossings—Railroad and Highway.*

Number of crossings of highways at grade in this State, -	3
Number of crossings of highways over or under railroad: Over,—3. Under,—0, - - -	3
Number of highway bridges 18 feet above track, - - -	3

*Stations.*

Number of stations on whole line, - - - - -	2
Same in Michigan, - - - - -	2

*Employés.*

Number of persons regularly employed on all roads operated by company, including officials, - - -	31
Same in Michigan, - - - - -	31

Classify your employés as per following list:

	Number.
Brakemen, - - - - -	1
Engineers, - - - - -	1
Firemen, - - - - -	1
Laborers, - - - - -	26
Others, - - - - -	2

REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? None.

*Road Bed and Track.*

Number of track sections in Michigan, - - -	1
Average length of sections (miles), - - -	10
Average number of men in each section gang, - - -	6
Number of new ties put in whole line during the year, - - -	2,000
Number of new ties put in track in Michigan, - - -	2,000
Average number of new ties per mile of road, - - -	200

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of 10 to 20 tons weight, exclusive of tender, - - - - -	1	\$4,000 00
Total, - - - - -	1	\$4,000 00
Number of logging cars, - - - - -	34	5,100 00
Other cars, - - - - -	2	50 00
Total, - - - - -	36	\$9,150 00

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by freight trains during the year, - - -	9,520
Total mileage of trains earning revenue, - - -	9,520

*Freight Forwarded at Michigan Stations.*

Lumber and forest products, - - - - -	Tons. 60,752
Total forwarded, - - - - -	60,752

*Tonnage of Articles Transported.—Entire Road.*

Lumber and forest products, - - - - -	Tons. 60,752	Per Cent. 100.00
Total tons carried, - - - - -	60,752	100.00

STATE OF MICHIGAN, }  
COUNTY OF MANISTEE, } ss.

Wm. Wenté, Secretary, and L. T. Dempsey, Treasurer of the Crawford & Manistee River Railway Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[ L. S. OF R. R. ]

Signed,

WILLIAM WENTE.  
L. T. DEMPSEY.

Subscribed and sworn to before me this 27th day of February, A. D. 1890.

JOHN W. SIBBEN, *Notary Public.*

ANNUAL REPORT  
OF THE  
MANISTEE & LUTHER RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed March 18, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President and General Manager*, R. G. PETERS, Eastlake, Mich.

*Secretary and Treasurer*, N. W. CAREY, Eastlake, Mich.

*Attorney*, A. J. DOVEL, Manistee, Mich.

DIRECTORS.

R. G. PETERS, Manistee, Mich.

H. A. CAREY, Eastlake, Mich.

J. H. PETERS, Eastlake, Mich.

G. M. BURR, Manistee, Mich.

A. J. DOVEL, Manistee, Mich.

Terms expire April 1, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—March 26, 1886.

Number of stockholders at date of last election,	-	-	-	-	6
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Number of stockholders in Michigan at same date,	-	-	-	-	6
--	---	---	---	---	---

Amount of full paid stock held in Michigan at same date,	-	-	-	-	All.
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Date of annual meeting of stockholders,—First Tuesday in April.

Fiscal year of company ends,—December 31.

General offices of the company are located at Eastlake, Mich.

GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income,	-	\$137,388 23
Total expenses, including taxes,	-	\$74,255 11
Net income,	-	\$63,133 12

	DEBIT.	CREDIT.
Interest on unfunded debt,, - - -	\$8,292 13	
Rentals of buildings, tracks, etc., - - -	2,000 00	
		\$10,292 13
Balance for the year, - - - - -	- - -	\$52,840 99
Balance (profit and loss last year), - - -	- - -	110,527 09
Balance forward to next year, - - -	\$163,368 08	
	\$163,368 08	\$163,368 08

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$400,000 00
Par value of shares, - - - \$100 00	
No. of shares issued, - - - 4,000	
Amount paid in on common, - - - \$100,000 00	
Total amount paid in, as per books of the company, -	100,000 00
Paid in per mile of road owned by company,—64 miles, - - - \$1,562 50	

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt, - - - - -	None.
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## UNFUNDED DEBT.

For current balances, - - - - -	\$99,284 56
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## RECAPITULATION.

Total unfunded debt, - - - - -	\$99,284 56
Total debt liabilities, - - - - -	\$99,284 56
Amount of debt liabilities per mile of road,—64 miles, -	1,551 32
Total amount of stock and debt, - - - - -	\$199,284 56
Stock and debt per mile of road,—64 miles, - - -	3,113 82

## GENERAL BALANCE SHEET.—Dr.

Construction account, - - - -	\$281,816 93	
Equipment account, - - - -	70,503 85	
		\$352,320 78
Other assets:		
Debit balances from companies and individuals, - - - - -	- - -	10,331 86
Total, - - - - -	- - -	\$362,652 64



## GENERAL BALANCE SHEET.--Cr.

Capital stock, - - - - -	\$100,000 00
Unfunded debt:	
Due R. G. Peters, - - - - -	99,284 56
Profit and loss or income accounts, - - - - -	163,368 08
Total, - - - - -	<u>\$362,652 64</u>

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment, - - - - -	\$352,320 78
Average cost of construction per mile of road, not including sidings,—64 miles, - - - - -	5,505 01
Proportion of cost for Michigan, - - - - -	<u>352,320 78</u>

## CHARGES AND CREDITS TO PROPERTY DURING THE YEAR.

## MAIN LINE.

Extensions and new sidings, - - - - -	\$18,255 22
New locomotives and cars, - - - - -	2,981 74
Total charges to property account, - - - - -	<u>\$21,236 96</u>
Net addition to property account, - - - - -	21,236 96

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line and branches:

Local fares, - - - - -	\$400 69
Total passenger fares, - - - - -	<u>\$400 69</u>
Total passenger department earnings, - - - - -	\$400 69
Proportion for Michigan, - - - - -	\$400 69
Per mile of road, - - - - -	6 26

## FREIGHT EARNINGS.

Main line and branches:

Local traffic, - - - - -	\$136,987 54
Total traffic, - - - - -	<u>\$136,987 54</u>
Total freight department earnings, - - - - -	136,987 54
Proportion for Michigan, - - - - -	\$136,987 54
Per mile of road, - - - - -	2,140 43
Total transportation earnings, - - - - -	<u>\$137,388 23</u>

Transportation earnings per mile of road, -	\$2,146 69	
Total earnings from operation of road, - - -		\$137,388 23
Total earnings per mile of road, -	\$2,146 69	
Proportion of taxable earnings for Michigan, - - -		137,388 23
Total taxable earnings per mile of road in Michigan, - - - - -	\$2,146 69	
Total income from all sources, - - - - -		\$137,388 23
Proportion of income for Michigan, - - - - -		137,388 23

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track, - - - - -	}	
Renewals of rails, - - - - -		\$10,655 12
Renewals of ties, - - - - -		
Repairs of buildings, - - - - -		103 59
Total, - - - - -		\$10,758 71

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives, - - - - -	\$13,184 06
Repairs of freight cars, - - - - -	6,831 22
Total, - - - - -	\$20,015 28

## CLASS 3.—Conducting Transportation.

Fuel for locomotives, - - - - -	\$14,400 42
Water supply, - - - - -	137 11
Oil and waste, - - - - -	1,524 29
Locomotive service, - - - - -	7,037 40
Freight train service, - - - - -	10,296 15
Freight train supplies, - - - - -	352 67
Telegraph expenses, maintenance and operating, - - -	903 84
Damage and loss of freight and baggage, - - - - -	25 00
Damages to property and cattle, - - - - -	141 25
Personal injuries, - - - - -	531 25
Total, - - - - -	\$35,349 38

## CLASS 4.—General Expenses.

Salaries of the general officers of the company, - - -	\$2,000 00
Insurance, - - - - -	72 00
Stationery and printing, - - - - -	18 39
Contingencies, - - - - -	3,176 51
Taxes, - - - - -	2,377 34
Total, - - - - -	\$7,644 24

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - -	15.14	\$11,246 21
Maintenance of motive power and cars, - - -	26.94	20,015 28
Conducting transportation, - - -	47.62	35,349 38
General expenses, including taxes, - - -	10.30	7,644 24
Total operating expenses and taxes, - - -	100.00	\$74,255 11
Operating expenses and taxes per mile of road,	\$1,160 23	
Proportion of operating expenses and taxes for Michigan:		
Main line, - - - - -	74,255 11	
Total proportion of expenses for Michigan, - - -		74,255 11
Percentage of expenses to earnings,—54%.		
Net earnings per mile of road, - - - - -	986 46	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Eastlake, Michigan to South Line, section 26, 19, 12, June, 1886.

From Eastlake, Michigan to Clement, section 26, 11, 14, June, 1886.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Eastlake to South Line, section 26, 19, 12, - - - - -	37.50	
Total length completed, - - - - -		37.50
Total length of branches owned by company, - - -		26.50
Total length of branches owned by company in Mich- igan, - - - - -	26.50	
Total length of road belonging to this company, - -		64.00
Total length of road belonging to this company in Michigan, - - - - -	64.00	
Gauge of track, 3 feet.		
Total miles operated by the company, - - - - -	Total Miles. 64.00	In Michigan. 64.00

## Number of Bridges and Trestles in Michigan.

Wooden bridges, number of, - - -	3; aggregate length, feet, - -	150
Wooden trestles, number of - - -	1; aggregate length, feet, - -	60
Total, - - - - -	4; - - - - -	210
73		

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State, and at what locality?

Flint & Pere Marquette Railroad at lot 1, section 7, 20, 16.

Grand Rapids & Indiana Railroad at section 15, 19, 12.

At what crossings are interlocking and derailing switches in operation?

Manistee, over Grand Rapids & Indiana.

What pattern or patterns have you adopted? Gravitt.

*Stations.*

Number of stations on whole line, - - - - -	3
Same in Michigan, - - - - -	3

*Employés.*

Number persons regularly employed on all roads operated by company, including officials, - - - - -	104
Same in Michigan, - - - - -	104

Classify your employés as per following list:

	Number.
Brakemen, - - - - -	13
Conductors, - - - - -	3
Engineers, - - - - -	7
Firemen, - - - - -	7
Laborers, - - - - -	50
Shopmen, - - - - -	5
Yardmen, - - - - -	3
Others, - - - - -	16

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	5
Average length of sections,—miles, - - - - -	10
Average number of men in each section gang, - - - - -	4
Number of new ties put in whole line during the year, - - - - -	12,000
Number of new ties put in track in Michigan, - - - - -	12,000
Average number of new ties per mile of road, - - - - -	2,700

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	3	
Number of locomotives of 10 to 20 tons weight, exclusive of tender, - - - - -	3	
Total, - - - - -	6	
Number of passenger cars—8-wheel, including official cars, - - - - -	1	
Number of box freight cars, - - - - -	2	
Number of platform cars, - - - - -	15	
Number of conductors' way cars, - - - - -	3	
Other cars, - - - - -	236	
Total, - - - - -	257	

Number of locomotives equipped with power brakes,	None.
Number of passenger-train cars equipped with power brakes,	None.
Number of freight cars equipped with power brakes,	Ratchet brake.
Are your freight cars being equipped with automatic couplers as required by Act. No. 147, Session Laws of 1885?	Regular logging car coupling.

## MILEAGE, TRAFFIC, ETC.

*Passenger Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of local passengers carried,	890		
Total number of passengers carried,	890		
Total passenger mileage, or passengers carried one mile,		13,350	
Average distance traveled by each passenger,		15	
Average amount received from each passenger,			\$0 45
Average rate of fare per mile for local passengers,			03
Average rate of fare per mile for all passengers,			03

*Freight Forwarded at Michigan Stations.*

	Tons.
Lumber and forest products,	95,509
Merchandise and other articles not enumerated above,	1,115
Total forwarded,	96,624

*Tonnage of Articles Transported—Entire Road.*

	Tons.	Per Cent.
Lumber and forest products,	95,509	98.85
Merchandise and other articles not enumerated above,	1,115	1.15
Total tons carried,	96,624	100.00

## ADDITIONAL QUESTIONS.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?  
31 miles of telephone belonging to this company.

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

May 11, Emil Peterson, in construction gang, twenty miles from East-lake. Fell from train; carelessness.

## INJURED.

Injured,

None.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....						
Deraillments.....						
Falling from trains.....		1				
Frogs.....						
Getting on and off trains.....						
Highway crossings.....						
Miscellaneous.....						
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on tracks.....						
Total.....		1				

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	1
Number of persons injured during the year,	—
Number of casualties purely accidental,	1
Number resulting from lack of caution, carelessness, or misconduct,	—
Persons killed or injured while intoxicated,	—
Trespassers and tramps killed or injured,	—
Suicides,	—

## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....			
Conductors.....			
Engineers.....			
Firemen.....			
Laborers.....	1		1
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....	1		1

STATE OF MICHIGAN, }  
COUNTY OF MANISTEE, } ss.

R. G. Peters, President, and N. W. Carey, Secretary and Treasurer, of the Manistee & Luther Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

R. G. PETERS.

N. W. CAREY.

Subscribed and sworn to before me this 8th day of March, A. D. 1890.

RAYMOND D. GILLET, *Notary Public*.

**ANNUAL REPORT**  
**OF THE**  
**GRASS LAKE & MANISTEE RIVER RAILROAD COMPANY,**

*For the Year Ending December 31, 1889.*

[Filed March 19, 1890.]

**OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.**

*President*, R. R. BLACKER, Manistee, Mich.

*Vice President and General Manager*, PATRICK NOUD, Manistee, Mich.

*Secretary*, M. FOY, JR., Manistee, Mich.

*Treasurer*, WM. WENTE, Manistee, Mich.

**DIRECTORS.**

GEO. KITZINGER, Manistee, Mich.

R. R. BLACKER, Manistee, Mich.

PATRICK NOUD, Manistee, Mich.

M. FOY, JR., Manistee, Mich.

WM. WENTE, Manistee, Mich.

Terms expire December 3, 1889.

**STOCKHOLDERS, STOCK AND GENERAL OFFICES.**

When chartered or articles of association filed,—February 4, 1886.

Number of stockholders at date of last election,	8
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Number of stockholders in Michigan at same date,	8
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Amount of full paid stock held in Michigan at same date,	\$40,000 00
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Date of annual meeting of stockholders,—December 31.

Fiscal year of company ends,—December 31.

General offices of the company are located at Manistee, Mich.



## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -	-	\$12,787 32
Total expenses, including taxes, - -	\$13,802 66	
Net deficit, - - - - -	\$1,015 34	
Balance for the year, - - - - -	\$1,015 34	
Balance (profit and loss) last year, - -	-	5,177 63
Balance forward to next year, - -	\$4,062 29	
	\$5,177 63	\$5,177 63

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$52,000 00
Par value of shares, - - \$100 00	
No. of shares issued, - - 350	
Amount paid in on common, - - -	\$35,000 00
Amount paid in on shares not issued, -	5,000 00
Total amount paid in, as per books of the company, -	40,000 00
Paid in per mile of road owned by company, -	
—12 miles, - - - - -	\$3,333 33

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt, - - - - -	None.
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## UNFUNDED DEBT.

Unfunded debt, - - - - -	None.
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## RECAPITULATION.

Total amount of stock and debt, - - - - -	\$40,000 00
Stock and debt per mile of road,—12 miles, - - -	3,333 33

## GENERAL BALANCE SHEET, Dr.

Construction account, - - - - -	\$32,000 00
Equipment account, - - - - -	8,000 00
	\$40,000 00
Cash items:	
•Cash, - - - - -	4,162 29
Total, - - - - -	\$44,162 29

## GENERAL BALANCE SHEET, Cr.

Capital stock,	\$40,000 00
Profit and loss or income accounts,	4,162 29
Total,	<u>\$44,162 29</u>

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment,	\$40,000 00
Average cost per mile of road, not including sidings,—12 miles,	3,333 33
Proportion of cost for Michigan,	40,000 00

## ANALYSIS OF EARNINGS.

## FREIGHT EARNINGS.

Through traffic,	\$12,787 32	
Total traffic,	<u>\$12,787 32</u>	
Total freight department earnings,		\$12,787 32
Proportion for Michigan,	\$12,787 32	
Per train mile,	72.3	
Per mile of road,	1,065 61	
Total transportation earnings,		12,787 32
Transportation earnings per mile of road,	\$1,065 61	
Transportation earnings per train mile,	72.3	
Total earnings from operation of road,		12,787 32
Total earnings per mile of road,	\$1,065 61	
Total earnings per train mile,	72.3	
Proportion of taxable earnings for Michigan,		12,787 32
Total taxable earnings per mile of road in Michigan,	<u>\$1,065 61</u>	
Total income from all sources,		\$12,787 32
Proportion of income for Michigan,		12,787 32

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track,	}	\$6,681 29
Renewals of rails,		
Renewals of ties,		
Repairs of bridges, including culverts and cattle guards,		
Repairs of fences, road crossings, and signs,		
Repairs of buildings,		
Total,		<u>\$6,681 29</u>

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives, - - - - -	\$766 72
Repairs of freight cars, - - - - -	785 46
Total, - - - - -	<u>\$1,552 18</u>

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	\$1,048 75
Oil and waste, - - - - -	223 64
Locomotive service, - - - - -	1,678 52
Freight train service, - - - - -	1,112 53
Total, - - - - -	<u>\$4,063 44</u>

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company, - -	\$1,250 00
Taxes, - - - - -	255 75
Total, - - - - -	<u>\$1,505 75</u>

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - -	48.41	\$6,681 29
Maintenance of motive power and cars, - -	11.24	1,552 18
Conducting transportation, - - -	29.44	4,063 44
General expenses, including taxes, - - -	10.91	1,505 75
Total operating expenses, and taxes, - -	100.00	<u>\$13,802 66</u>
Operating expenses and taxes per mile of road,	\$1,150 22	
Operating expenses and taxes per train mile run,		
for trains earning revenue,—1,768 miles,	78.1	
Proportion of operating expenses and taxes for Michigan:		
Main line, - - - - -	13,802 66	
Total proportion of expenses for Michigan,		<u>\$13,802 66</u>
Percentage of expenses to earnings,—1.08%		
Net deficit per mile of road, - - -	84 61	
Net deficit per train mile, - - -	05.1	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Manistee river to forest terminal, September 3, 1886.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Manistee river to forest terminal,	12 00	
Total length completed, - - - - -		12.00

	Miles. 100ths.	Miles. 100ths.
Total length of branches owned by company, -		1.50
Total length of branches owned by company in Michigan, - - - - -	1.50	
Total length of road belonging to this company, -		13.50
Total length of road belonging to this company in Michigan, - - - - -	13.50	
Aggregate length of tracks in Michigan belonging to this company, computed as single track, -		13.50
Gauge of track, 3 feet.		

	Total Miles.	In Michigan.
Total miles operated by the company, - - -	13.50	13.50

*Crossings—Railroad and Highway.*

Number of crossings of highways at grade in this State, -	4
Number of crossings of highways at grade in this State at which there are gates or flagmen, -	None.
Are your frogs and guard rails blocked as required by Act 174, Session Laws 1883? - - - - -	Yes.

*Stations.*

Number of stations on whole line, - - - - -	2
Same in Michigan, - - - - -	2

*Employés.*

Number persons regularly employed on all roads operated by company, including officials, - - - - -	22
Same in Michigan, - - - - -	22
Classify your employés as per following list:	
Brakemen, - - - - -	1
Engineers, - - - - -	1
Firemen, - - - - -	1
Others, - - - - -	19

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - -	None.
Give the number of miles required to complete fence both sides of your track in Michigan, and the counties in which needed:	
Crawford and Kalkaska, - - - - -	24
Total miles required, - - - - -	24

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	1
Average length of sections,—miles, - - - - -	12
Average number of men in each section gang, - - - - -	5

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of 10 to 20 tons weight, exclusive of tender, - - - - -	1	\$3,000 00
Total, - - - - -	1	\$3,000 00
Logging cars, - - - - -	30	4,900 00
Hand cars, - - - - -	1	100 00
Total, - - - - -	31	\$5,000 00

Number of locomotives equipped with power brakes, - None.  
 What patterns of power brakes have you in use, and number of locomotives  
 and cars with each? Hand brake.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by freight trains during the year, - -	17,680
Total mileage of trains earning revenue, -	17,680

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of through freight carried, -	46,230		
Total tons of freight carried, - - -	46,230		
Total mileage of through freight, - - - -		17,680	
Total freight mileage, or tons carried one mile, -		462,300	
Average ton haul for through freight, - - -		10	
Average amount received for each ton haul, - -			\$0 27.66
Average rate per ton per mile received for through freight, -			02.75
Average rate per ton per mile, received for all freight, -			02.75

*Freight Forwarded at Michigan Stations.*

	Tons.
Lumber and forest products, - - - - -	46,230
Total forwarded, - - - - -	46,230

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Lumber and forest products, - - - - -	46,230	100.00
Total tons carried, - - - - -	46,230	100.00

STATE OF MICHIGAN, }  
COUNTY OF MANISTEE, } ss.

R. R. Blacker, President, and M. Foy, Jr., Secretary, of the Grass Lake & Manistee River Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

Signed,

[ L. S. OF R. R. ]

R. R. BLACKER.  
M. FOY, JR.

Subscribed and sworn to before me this 17th day of March, A. D. 1890.

GEO. A. DUNHAM, *Notary Public.*

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ANNUAL REPORT  
OF THE  
HOBART & MANISTEE RIVER RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed March 19, 1890.]

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OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, JOHN CANFIELD, Manistee, Mich.

*Secretary and Treasurer*, EDWARD D. WHEELER, Manistee, Mich.

*General Manager and Superintendent*, HENRY W. MARSH, Manistee, Mich.

DIRECTORS.

JOHN CANFIELD, Manistee, Mich.

EDWARD D. WHEELER, Manistee, Mich.

HENRY W. MARSH, Manistee, Mich.

RICHARD G. PETERS, Manistee, Mich.

A. O. WHEELER, Manistee, Mich.

Terms expire July 18, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—July 19, 1879.

Number of stockholders at date of last election,	-	-	-	-	-	-	7
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Number of stockholders in Michigan at same date,	-	-	-	-	-	-	7
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Amount of full paid stock held in Michigan at same date,	-	-	-	-	-	-	\$60,000 00
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Date of annual meeting of stockholders,—Third Wednesday in July.

Fiscal year of company ends,—December 31.

General offices of the company are located at Manistee, Michigan.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$32,281 73
Total expenses, including taxes, - - -	\$30,781 73	
Net income, - - - - -		1,500 00
Balance for the year, - - - - -		\$1,500 00
Balance (profit and loss) last year, - - -	\$17,138 55	
Balance forward to next year, - - - - -		15,638 35
	\$17,138 55	\$17,138 55

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$60,000 00
Par value of shares, - - - \$100 00	
No. of shares issued, - - - 600	
Amount paid in on common, - - - - -	\$60,000 00
Total amount paid in as per books of company, - - -	60,000 00
Paid in per mile of road owned by company,— 9.24 miles, - - - - -	\$6,493 51

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt, - - - - -	None.
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## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For Construction.....	-----	-----
For Equipment.....	-----	-----
For Real Estate.....	-----	-----
For Renewals.....	-----	-----
For Miscellaneous.....	-----	-----
For Current Balances.....	-----	\$45,584 39
Total unfunded debt.....	-----	\$45,584 39

## RECAPITULATION.

Total unfunded debt, - - - - -	\$45,584 39
Total debt liabilities, - - - - -	\$45,584 39
Amount of debt liabilities per mile of road,—9.24 miles, -	4,933 37
Total amount of stock and debt, - - - - -	105,584 39
Stock and debt per mile of road,—9.24 miles, - - - - -	11,426 88



## GENERAL BALANCE SHEET, Dr.

Construction account, - - - - -	\$55,716 76
Equipment account, - - - - -	22,000 00
Other assets:	
Materials and supplies, - - - - -	12,229 28
Profit and loss, - - - - -	15,638 35
Total, - - - - -	<u>\$105,584 39</u>

## GENERAL BALANCE SHEET, Dr.

Capital stock, - - - - -	\$60,000 00
Unfunded debt:	
Vouchers and accounts, - - - - -	44,938 76
Other liabilities:	
Tax account, - - - - -	645 63
Total, - - - - -	<u>\$105,584 39</u>

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment, - - - - -	\$77,716 76
Average cost per mile of road, not including sidings,—	
9.24 miles, - - - - -	8,410 90
Proportion of cost for Michigan, - - - - -	77,716 76

## ANALYSIS OF EARNINGS.

## FREIGHT EARNINGS.

Local traffic, - - - - -	\$32,281 73
Total traffic, - - - - -	<u>\$32,281 73</u>
Total freight department earnings, - - - - -	\$32,281 73
Proportion for Michigan, - - - - -	\$32,281 73
Per mile of road, - - - - -	3,493 69
Total transportation earnings, - - - - -	<u>\$32,281 73</u>
Transportation earnings per mile of road, - - - - -	\$3,493 69
Transportation earnings per train mile, - - - - -	2 01
Total earnings from operation of road, - - - - -	<u>\$32,281 73</u>
Total earnings per mile of road,—9.24 miles, - - - - -	\$3,493 69
Total earnings per train mile,—16,000 miles, - - - - -	2 01
Proportion of taxable earnings for Michigan, - - - - -	32,281 73
Total taxable earnings per mile of road in Mich., - - - - -	3,493 69
Total income from all sources, - - - - -	<u>\$32,281 73</u>
Proportion of income for Michigan, - - - - -	32,281 73

### ANALYSIS OF EXPENSES.

**CLASS 1.—Maintenance of Way and Buildings.**

Repairs of road way and track,	-	-	-	-	-	-	-	-	-	}	\$10,773	61	
Renewals of rails,	-	-	-	-	-	-	-	-	-				
Renewals of ties,	-	-	-	-	-	-	-	-	-				
Repairs of buildings,	-	-	-	-	-	-	-	-	-			307	82
Total,	-	-	-	-	-	-	-	-	-		<u>\$11,081</u>	<u>43</u>	

**CLASS 2. Maintenance of Motive Power and Cars.**

Repairs of locomotives, -	-	-	-	-	-	}	\$3,078 17
Repairs of passenger cars, -	-	-	-	-	-		
Repairs of freight cars, -	-	-	-	-	-		
Total, -	-	-	-	-	-		\$3,078 17

**CLASS 3.—Conducting Transportation.**

Fuel for locomotives,	-	-	-	-	-	-	-	-	-
Water supply,	-	-	-	-	-	-	-	-	-
Oil and waste,	-	-	-	-	-	-	-	-	-
Locomotive service,	-	-	-	-	-	-	-	-	-
Passenger train service,	-	-	-	-	-	-	-	-	-
Passenger train supplies,	-	-	-	-	-	-	-	-	-
Mileage of passenger cars,	-	-	-	-	-	-	-	-	-
Freight train service,	-	-	-	-	-	-	-	-	-
Freight train supplies,	-	-	-	-	-	-	-	-	-
Mileage of freight cars,	-	-	-	-	-	-	-	-	-
Telegraph expenses,—maintenance and operating,	-	-	-	-	-	-	-	-	-
Damage and loss of freight and baggage,	-	-	-	-	-	-	-	-	-
Damages to property and cattle,	-	-	-	-	-	-	-	-	-
Personal injuries,	-	-	-	-	-	-	-	-	-
Agents and station service,	-	-	-	-	-	-	-	-	-
Station supplies,	-	-	-	-	-	-	-	-	-
Total,	-	-	-	-	-	-	-	-	-

}

\$15,390 86

\$15,390 86

**CLASS 4.—General Expenses.**

Salaries of the general officers of the company,	-	-	}	\$1,231 27
Salaries of clerks in general offices,	-	-		
Law expenses,	-	-		
Insurance,	-	-		
Stationery and printing,	-	-		
Outside agencies and advertising,	-	-		
Contingencies,	-	-		
Taxes,	-	-	-	-
Total,	-	-	-	\$1,231 27

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - -	36.00	\$11,081 43
Maintenance of motive power and cars, - -	10.00	3,078 17
Conducting transportation, - - - -	50.00	15,390 86
General expenses, including taxes, - -	4.00	1,231 27
Total operating expenses, and taxes, - -	100.00	\$30,781 73
Operating expenses and taxes per mile of road,	\$3,331 26	
Operating expenses and taxes per train mile run, for trains earning revenue,—16,000 miles,	1 92	
Proportion of operating expenses and taxes for Michigan, main line, - - - -	30,781 73	
Total proportion of expenses for Michigan,	- -	\$30,781 73
Percentage of expenses to earnings,—95.34 %.		
Net earnings per mile of road, - - - -	\$162 43	
Net earnings per train mile, - - - -	09	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:

From Hobart to Manistee river, 1880.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Hobart to Manistee river, - -	9.24	
Total length completed, - - - -	- -	9.24
Total length of road belonging to this company, - -	- -	9.24
Total length of road belonging to this company in Michigan, - - - -	9.24	
Aggregate length in Michigan of sidings, spurs and other tracks not above enumerated, - -	10.00	
Aggregate length of tracks in Michigan belong- ing to this company, computed as single track, - -	- -	19.24
Gauge of track, 3 feet.		
Total miles operated by the company, - - - -	Total Miles. 9.24	In Michigan. 9.24

## Number of Bridges and Trestles in Michigan.

Wooden trestles, number of, - 2; aggregate length, feet, -	685
Total, - - - - 2; - - - -	685

## Crossings—Railroad and Highway.

Number of crossings of highways at grade in this State, -	1
---	---

## Stations.

Number of stations on whole line, - - - -	2
Same in Michigan, - - - -	2

*Employees.*

Number persons regularly employed on all roads operated by company, including officials, - - - - -	40
Same in Michigan, - - - - -	40

Classify your employes as per following list:

	Number.
Brakemen, - - - - -	6
Engineers, - - - - -	2
Firemen, - - - - -	2
Others, - - - - -	30

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	1
Average length of sections,—miles, - - - - -	9.24
Average number of men in each section gang, - - - - -	4

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of 10 to 20 tons weight, exclusive of tender, - - - - -	2	\$12,000 00
Total, - - - - -	2	\$12,000 00
Number of platform cars, - - - - -	6	1,200 00
Log cars, - - - - -	36	7,200 00
Total, - - - - -	42	\$20,400 00
Number of locomotives equipped with power brakes, - - - - -		2

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by freight trains during the year,—estimated, - - - - -	16,000
Total mileage of trains earning revenue, - - - - -	16,000

## FREIGHT TRAFFIC.

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of local freight carried, - - - - -	103,300		
Total tons of freight carried, - - - - -	103,300		
Total mileage of local freight, - - - - -		723,100	
Total freight mileage or tons carried one mile, - - - - -		723,100	
Average ton haul for local freight, - - - - -		7	
Average ton haul for all freight, - - - - -		7	
Average amount received for each ton haul, - - - - -			\$0 31.50
Average rate per ton per mile, received for local freight, - - - - -			04.50
Average rate per ton per mile, received for all freight, - - - - -			04.50

1889.]

## HOBART &amp; MANISTEE RIVER RAILROAD CO.

595

*Freight Forwarded at Michigan Stations.*

	Tons.
Lumber and forest products, . . . . .	103,300
Total forwarded, . . . . .	103,300

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Lumber and forest products, . . . . .	103,300	100.00
Total tons carried, . . . . .	103,300	100.00

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

Killed, . . . . . None.

## INJURED.

January 9, George Sternhoff, brakeman. Fell from locomotive; arm injured.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Causes of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....						
Derailements.....						
Falling from trains.....					1	
Frogs.....						
Getting on and off trains.....						
Highway crossings.....						
Miscellaneous.....						
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on track.....						
Total.....					1	

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year, . . . . .	—
Number of persons injured during the year, . . . . .	1
Number of casualties purely accidental, . . . . .	—
Number resulting from lack of caution, carelessness, or misconduct, . . . . .	1
Persons killed or injured while intoxicated, . . . . .	—
Trespassers and tramps killed or injured, . . . . .	—
Suicides, . . . . .	—

## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....		1	1
Conductors.....			
Engineers.....			
Firemen.....			
Labors.....			
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....		1	1

STATE OF MICHIGAN, }  
COUNTY OF MANISTEE, } ss.

John Canfield, President, and Edward D. Wheeler, Secretary, of the Hobart & Manistee River Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

Signed,

[ L. S. OF R. R. ]

JOHN CANFIELD.

EDWARD D. WHEELER.

Subscribed and sworn to before me this 17th day of March, A. D. 1890.

CHAS. C. YOUNG, *Notary Public.*

ANNUAL REPORT  
OF THE  
NORTH BRANCH & SAUBLE RIVER RAILROAD COMPANY,  
*For the Year Ending December 31, 1889.*

[Filed March 25, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President, General Manager and Superintendent, C. D. DANAHER, Ludington, Mich.*  
*Vice President and Attorney, M. B. DANAHER, Ludington, Mich.*  
*Secretary and Treasurer, JAS. E. DANAHER, Ludington, Mich.*

DIRECTORS.

C. D. DANAHER, Ludington, Mich.  
J. E. DANAHER, Ludington, Mich.  
M. B. DANAHER, Ludington, Mich.  
J. D. HARRINGTON, Ludington, Mich.  
M. A. DANAHER, Ludington, Mich.

Terms expire July 11, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—June 8, 1888.

Number of stockholders at date of last election, - - - - - 7

Number of stockholders in Michigan at same date, - - - - - 7

Amount of full paid stock held in Michigan at same date, - - - - \$20,000 00

Date of annual meeting of stockholders,—June 11.

Fiscal year of company ends,—January 31.

General offices of the company are located at Ludington, Mich.

GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$12,389 44
Total expenses, including taxes, - - - - -	\$9,163 29	
Net income, - - - - -		3,226 15
Balance for the year, - - - - -		\$3,226 15

	DEBIT.	CREDIT.
Balance (profit and loss) last year,	- - -	\$10,897 27
Balance forward to next year,	\$14,123 42	
	<u>\$14,123 42</u>	<u>\$14,123 42</u>

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	- - -	\$50,000 00
Par value of shares,	\$100 00	
No. of shares issued,	200	
Amount paid in on common,	\$20,000 00	
Total amount paid in, as per books of the company,	- - -	\$20,000 00
Paid in per mile of road owned by company,		
—10 miles,	\$2,000 00	

## ANALYSIS OF DEBT ACCOUNTS.

## , FUNDED DEBT.

Funded debt,	- - - - -	None.
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## UNFUNDED DEBT.

For construction and equipment,	- - - - -	\$16,733 91
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## RECAPITULATION.

Total unfunded debt,	- - - - -	\$16,733 91
Total debt liabilities,	- - - - -	\$16,733 91
Amount of debt liabilities per mile of road,—10 miles,	- - - - -	1,673 09
Total amount of stock and debt,	- - - - -	\$36,733 91
Stock and debt per mile of road,—10 miles,	- - - - -	3,673 09

## GENERAL BALANCE SHEET, DR.

Construction and equipment account,	- - - - -	\$50,857 33
Total,	- - - - -	<u>\$50,857 33</u>

## GENERAL BALANCE SHEET, CR.

Capital stock,	- - - - -	\$20,000 00
Unfunded debt:		
Other liabilities,	- - - - -	16,733 91
Profit and loss or income accounts,	- - - - -	14,123 42
Total,	- - - - -	<u>\$50,857 33</u>



## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment,	\$50,857 33
Average cost per mile of road, not including sidings,—10 miles,	5,085 73
Proportion of cost for Michigan,	50,857 33

## ANALYSIS OF EARNINGS.

## FREIGHT EARNINGS.

Local traffic,	\$12,389 44	
Total traffic,	\$12,389 44	
Total freight department earnings,		\$12,389 44
Proportion for Michigan,	\$12,389 44	
Per mile of road,	1,238 94	
Total transportation earnings,		\$12,389 44
Transportation earnings per mile of road,	\$1,238 94	
Total earnings from operation of road,		\$12,389 44
Total earnings per mile of road,	\$1,238 94	
Total income from all sources,		\$12,389 44
Proportion of income for Michigan,		12,389 44

## ANALYSIS OF EXPENSES.

## RECAPITULATION OF EXPENSES.

Maintenance of way and buildings,		
Maintenance of motive power and cars,		
Conducting transportation,		
General expenses, including taxes,		\$9,163 29
Total operating expenses and taxes,		\$9,163 29
Operating expenses and taxes per mile of road,	\$916 33	
Proportion of operating expenses and taxes for Michigan, main line,	9,163 29	
Total proportion of expenses for Michigan,		\$9,163 29
Percentage of expenses to earnings,—73.96 %.		
Net earnings per mile of road,	322 61	

## DESCRIPTION OF ROAD.

.Date when the road was opened for use between its present termini:

From section twenty-one, town eighteen north, range fifteen west, to section four, town nineteen north, range fifteen west, August, 1888.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Section 21, T. 18 N., R. 15 W., to Section 4, T. 19 N., R. 15 W., - - - - -	10.00	
Total length completed, - - - - -		10.00
Total length of road belonging to this company, - - - - -		10.00
Total length of road belonging to this company in Michigan, - - - - -	10.00	
Aggregate length of tracks in Michigan belonging to this company, computed as single track, - - - - -		10.00
Gauge of track, 3 feet.		

	Total Miles.	In Michigan.
Total miles operated by the company, - - - - -	10.00	10.00

*Crossings—Railroad and Highway.*

What railroads cross your road at grade in this State and at what locality?

Flint & Pere Marquette railroad at Manistee Junction.

At what crossings are interlocking and derailing switches in operation?

None.

Number of crossings of highways at grade in this State? 3

*Stations.*

Number of stations on whole line, - - - - - 2  
Same in Michigan, - - - - - 2

*Employés.*

Number of persons regularly employed on all roads operated  
by company, including officials, - - - - - 12  
Same in Michigan, - - - - - 12

Classify your employés as per following list:

	Number.
Brakemen, - - - - -	2
Conductors, - - - - -	2
Engineers, - - - - -	2
Firemen, - - - - -	4
Others, - - - - -	2

*Road Bed and Track.*

Number of track sections in Michigan, - - - - - 1  
Average length of sections,—miles, - - - - - 10  
Average number of men in each section gang, - - - - - 4

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of 10 to 20 tons weight, exclusive of tender, - - - - -	2	\$7,000 00
Total, - - - - -	2	\$7,000 00
Number of platform cars, - - - - -	50	7,000 00
Total, - - - - -	50	\$14,000 00

STATE OF MICHIGAN, }  
COUNTY OF MANISTEE, } ss.

C. D. Danaher, President, and Jas. E. Danaher, Secretary, of the North Branch & Sauble River Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

[L. S. OF R. R.]

Signed,

C. D. DANAHER.

JAS. E. DANAHER.

Subscribed and sworn to before me this 24th day of March, A. D. 1890.

J. D. HARRINGTON, *Notary Public.*

ANNUAL REPORT  
OF THE  
BEAR LAKE & EASTERN RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed April 22, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President, General Manager and Auditor, GEO. W. HOPKINS, Bear Lake, Mich.*  
*Secretary, D. H. HOPKINS, Bear Lake, Michigan.*  
*Treasurer, ELLA S. HOPKINS, Bear Lake, Michigan.*  
*General Superintendent, C. G. WAREHAM, Bear Lake, Michigan.*  
*Superintendent of Telegraph, Cashier, General Passenger and Freight Agent,*  
*JOHN E. BOWEN, JR., Bear Lake, Michigan.*

DIRECTORS.

GEO. W. HOPKINS, Bear Lake, Michigan.  
 D. H. HOPKINS, Dallas, Arkansas.  
 E. S. HOPKINS, Bear Lake, Michigan.  
 M. J. HOPKINS, Dallas, Arkansas.  
 M. E. H. COLLINS, Bear Lake, Michigan.

Terms expire January 1, 1890.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—January 24, 1882.

Number of stockholders at date of last election, - - - - - 7

Number of stockholders in Michigan at same date, - - - - - 7

Amount of part paid stock held in Michigan at same date, - - - - - \$117,600 00

Date of annual meeting of stockholders,—First Monday in February.

Fiscal year of company ends,—December 31.

General offices of the company are located at Bear Lake, Michigan.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -		\$10,708 61
Total expenses including taxes, - - -	\$5,962 97	
Net income, - - - - -		\$4,745 64
Interest on funded debt, - \$484 05		
Interest on unfunded debt, - 746 04		
	\$1,230 09	
Balance for the year, - - - - -		\$3,515 55
Balance (profit and loss) last year, - - -		11 34
Balance forward to next year, - - -	\$3,526 89	
	\$3,526 89	\$3,526 89

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -	\$250,000 00
Par value of shares, - - - - \$100	
No. of shares issued, - - - - 1,046	
Amount paid in on common, - - - -	\$104,664 00
Total amount paid in, as per books of the company, -	\$104,664 00
Paid in per mile of road owned by company,—miles, 18, - - - -	\$5,814 66

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Class, Character and Date of Issue.	Rate of Interest.	When Due.	Where Payable.	Amount.
Second mortgage bond.....	8%	September 1, 1890....	Grand Rapids.	\$8,000 00
Total funded debt.....				\$8,000 00

## UNFUNDED DEBT.

For what Incurred.	Is the Same to be Funded, or How Liquidated.	Amount.
For construction.....		
For equipment.....		
For real estate.....		
For renewals.....		
For miscellaneous.....	To be paid from net earnings.....	{ \$9,769 57 784 57
For current balances.....		
Total unfunded debt.....		\$10,554 14

## RECAPITULATION.

Total funded debt, - - - - -	\$6,000 00
Total unfunded debt, - - - - -	10,554 14
Total debt liabilities, - - - - -	<u>\$16,554 14</u>
Amount of debt liabilities per mile of road,—18 miles, - -	919 67
Total amount of stock and debt, - - - - -	<u>\$121,218 14</u>
Stock and debt per mile of road,—18 miles, - - - - -	6,734 33

## GENERAL BALANCE SHEET.—Dr.

Construction account, - - - - -	\$93,744 74
Equipment account, - - - - -	30,215 72
	<u>\$123,960 46</u>
Other assets:	
Material and supplies, - - - - -	784 57
Total, - - - - -	<u>\$124,745 03</u>

## GENERAL BALANCE SHEET.—Cr.

Capital stock, - - - - -	\$104,664 00
Funded debt, - - - - -	6,000 00
Unfunded debt:	
Notes payable, - - - - -	\$4,160 47
Other liabilities:	
Miscellaneous, - - - - -	6,393 67
	<u>10,554 14</u>
Profit and loss or income accounts, - - - - -	3,526 89
Total, - - - - -	<u>\$124,745 03</u>

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road and Branches Built by Company.*

Total expended for construction and equipment, - -	\$123,960 46
Average cost per mile of road not including sidings, —18 miles, - - - - -	6,886 69
Proportion of cost for Michigan, - - - - -	123,960 46

## ANALYSIS OF EARNINGS.

## PASSENGER EARNINGS.

Main line and branches:	
Local fares, - - - - -	\$85 36
Total passenger fares, - - - - -	<u>\$85 36</u>
Total passenger department earnings, - - - - -	\$85 36

Proportion for Michigan,	-	-	-	\$85	36
Per train mile,	-	-	-	-	02.13
Per mile of road,	-	-	-	4	74

## FREIGHT EARNINGS.

Main line and branches:					
Local traffic,	-	-	-	\$10,623	25
Total traffic,	-	-	-	\$10,623	25
Total freight department earnings,	-	-	-		\$10,623 25
Proportion for Michigan,	-	-	-	\$10,623	25
Per train mile,	-	-	-	2	65
Per mile of road,	-	-	-	590	18
Total transportation earnings,	-	-	-		\$10,708 61
Transportation earnings per mile of road,	-	-	-	\$594	92
Transportation earnings per train mile,	-	-	-	2	68
Total earnings from operation of road,	-	-	-		\$10,708 61
Total earnings per mile of road,	-	-	-	\$594	92
Total earnings per train mile,	-	-	-	2	68
Proportion of taxable earnings for Michigan,	-	-	-		\$10,708 61
Total taxable earnings per mile of road in Michigan,	-	-	-	\$594	92
Total income from all sources,	-	-	-		\$10,708 61
Proportion of income for Michigan,	-	-	-		10,708 61

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track,	-	-	-	\$1,304	44
Repairs of fences, road crossings, and signs,	-	-	-	80	55
Total,	-	-	-	\$1,384	99

## CLASS 2.—Maintenance of Motive Power and Cars.

Repairs of locomotives,	-	-	-	\$274	30
Repairs of freight cars,	-	-	-	549	88
Total,	-	-	-	\$824	18

## CLASS 3.—Conducting Transportation.

Fuel for locomotives,	-	-	-	\$651	05
Water supply,	-	-	-	6	00
Oil and waste,	-	-	-	235	77
Freight train service,	-	-	-	2,648	58
Station supplies,	-	-	-	20	84
Total,	-	-	-	\$3,562	24

## CLASS 4.—General Expenses.

Contingencies, - - - - -	\$10 75
Taxes, - - - - -	180 81
Total, - - - - -	<u>\$191 56</u>

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - -	23.22	\$1,384 99
Maintenance of motive power and cars, - -	13.82	824 18
Conducting transportation, - - -	59.73	3,562 24
General expenses, including taxes, - - -	3.23	191 56
Total operating expenses, and taxes, - -	100.00	<u>\$5,962 97</u>
Operating expenses and taxes per mile of road, -18 miles, - - -	\$331 27	
Operating expenses and taxes per train mile run, for trains earning revenue,—4,000 miles, - -	1 49	
Proportion of operating expenses and taxes for Michigan:		
Main line, - - - - -	5,962 97	
Total proportion of expenses for Michigan, - - -		<u>5,962 97</u>
Percentage of expenses to earnings,—55%.		
Net earnings per mile of road, - - - - -	263 64	
Net earnings per train mile, - - - - -	1 18	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Pierport, Michigan, to Maple Grove, Michigan, November 1, 1887.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Pierport to Maple Grove, - -	18.00	
Total length completed, - - - - -		<u>18.00</u>
Total length of road belonging to this company, - - -		18.00
Total length of road belonging to this company in Michigan, - - -	18.00	
Aggregate length of tracks in Michigan belonging to this company, computed as single track, - -		<u>18.00</u>

Gauge of track, 3 feet.

	Total Miles. In Michigan.	
Total miles operated by the company, - - -	18.00	18.00

## Number of Bridges and Trestles in Michigan.

Wooden bridges, number of, - - -	3; aggregate length, feet, - -	96
Wooden trestles, number of, - - -	2; aggregate length, feet, - -	700
Total, - - - - -	5; - - - - -	<u>796</u>



*Crossings—Railroad and Highway.*

Number of crossings of highways at grade in this State, -	13
Number of crossings of highways over or under railroad:	
Over,—12 Under,—1,	13
Are your frogs and guard rails blocked as required by act 174, session laws 1883?	Yes.

*Stations.*

Number of stations on whole line, - - - - -	5
Same in Michigan, - - - - -	5

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials, - - - - -	11
Same in Michigan, - - - - -	11

Classify your employes as per following list:

	Number.
Engineers, - - - - -	2
Firemen, - - - - -	2
Laborers, - - - - -	4
Others, - - - - -	3

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - -	9
Give the number of miles required to complete fence both sides of your track, in Michigan, and the counties in which needed:	
Manistee county, - - - - -	27
Total miles required, - - - - -	27

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	1
Average length of sections,—miles, - - - - -	18
Average number of men in each section gang, - - - - -	4

## ROLLING STOCK.

Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	3	\$9,500 00
Total, - - - - -	3	\$9,500 00
Number of passenger cars—8-wheel, including official cars, - - - - -	1	1,000 00
Number of platform cars, - - - - -	53	16,215 72
Other cars, - - - - -	14	3,500 00
Total, - - - - -	71	\$30,215 72

Number of locomotives equipped with power brakes, 1  
 Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? No.  
 What pattern or patterns have you adopted for use? Link and pin.

## MILEAGE, TRAFFIC, ETC.

*Train Mileage.*

Miles run by freight trains during the year,	-	-	4,000
			4,000
Total mileage of trains earning revenue,	-	-	4,000

## ADDITIONAL QUESTIONS.

*Telegraph.*

Number of miles of telegraph on your road, and to whom does it belong?

Six miles; poles belong to railroad company, wires to Western Union.

STATE OF MICHIGAN, }  
 COUNTY OF MANISTEE, } ss.

E. S. Hopkins, Treasurer, of the Bear Lake & Eastern Railroad Company, being duly sworn, deposes and says that she has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of her knowledge and belief.

[ L. S. OF R. R. ]

Signed,

E. S. HOPKINS.

Subscribed and sworn to before me this 18th day of April, A. D. 1890.

JOHN E. BOWEN, *Notary Public*

ANNUAL REPORT  
OF THE  
LAKE COUNTY RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed June 4, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*Auditor*, JOHN S. WOODRUFF, Ludington, Mich.  
*General Manager*, THOMAS R. LYON, Ludington, Mich.  
*General Superintendent* EDWIN GOODRICH, Branch, Mich.  
*Chief Engineer*, CHAS. A. WALLINGER, Branch, Mich.

DIRECTORS.

THOMAS R. LYON, Ludington, Mich.  
JOHN B. LYON, Chicago, Ill.  
JOHN S. WOODRUFF, Ludington, Mich.  
LUCIUS K. BAKER, Ludington, Mich.  
M. A. NEILAN, San Francisco, Cal.

STOCKHOLDERS, STOCK AND GENERAL OFFICES.

When chartered or articles of association filed,—Executed July 12, 1880. Filed September 8, 1880.

Number of stockholders at date of last election,—Seven original subscribers.

Number of stockholders in Michigan at same date, - - - - - 6

Amount of full paid stock held in Michigan at same date,—No certificate of Stock issued.

Date of annual meeting of stockholders,—September 1.

General offices of the company are located at Ludington, Mich.

GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income, - - - - -	-	\$20,061 08
Total expenses, including taxes, - -	\$19,161 08	
Net income, - - - - -	-	\$900 00

	DEBIT.	CREDIT.
Balance for the year, - - - - -	-	\$900 00
Balance (profit and loss) last year, - - - - -	-	10,100 00
Balance forward to next year, - - - - -	\$11,000 00	
	<u>\$11,000 00</u>	<u>\$11,000 00</u>

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association, -		\$300,000 00
Par value of shares, - \$100 00		
Amount paid in common, - - - - -	\$60,000 00	
Total amount paid in as per books of the company, - -		\$60,000 00
Paid in per mile of road owned by company,—		
11 miles, - - - - -	\$5,454 54	

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Funded debt, - - - - -	None.
------------------------	-------

## UNFUNDED DEBT.

For What Incurred.	Is the Same to be Funded or How Liquidated.	Amount.
For construction.....	-----	-----
For equipment.....	-----	-----
For real estate.....	-----	-----
For renewals.....	-----	-----
For miscellaneous.....	-----	-----
For current balances.....	-----	\$900 00
Total unfunded debt.....	-----	\$900 00

## RECAPITULATION.

Total unfunded debt, - - - - -	\$900 00
Total debt liabilities, - - - - -	\$900 00
Amount of debt liabilities per mile of road,—11 miles, -	81 81
Total amount of stock and debt, - - - - -	60,900 00
Stock and debt per mile of road,—11 miles, - - - - -	5,536. 35

## GENERAL BALANCE SHEET.—Dr.

Construction account, - - - - -	\$70,900 00
Cash items:	
Cash, - - - - -	1,000 00
Total, - - - - -	<u>\$71,900 00</u>

## GENERAL BALANCE SHEET.—CR.

Capital stock, - - - - -	\$60,000 00
Unfunded debt:	
Due employes, - - - - -	900 00
Profit and loss or income accounts, - - - - -	11,000 00
Total, - - - - -	<u>\$71,900 00</u>

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for construction and equipment, - - -	\$70,900 00
Average cost per mile of road, not including sidings,—	
11 miles, - - - - -	6,445 54
Proportion of cost for Michigan,—11 miles, - - -	<u>70,900 00</u>

## ANALYSIS OF EARNINGS.

## FREIGHT EARNINGS.

Main line and branches:	
Local traffic, - - - - -	\$20,061 08
Total traffic, - - - - -	<u>\$20,061 08</u>
Total freight department earnings, - - - - -	\$20,061 08
Proportion for Michigan, - - - - -	\$20,061 08
Per mile of road, - - - - -	1,823 73
Total transportation earnings, - - - - -	<u>\$20,061 08</u>
Transportation earnings per mile of road, - - - - -	\$1,823 73
Total earnings from operation of road, - - - - -	<u>\$20,061 08</u>
Total earnings per mile of road, - - - - -	\$1,823 73
Proportion of taxable earnings for Michigan, - - - - -	\$20,061 08
Total taxable earnings per mile of road in Michigan, - - - - -	\$1,823 73
Total income from all sources, - - - - -	<u>\$20,061 08</u>
Proportion of income for Michigan, - - - - -	20,061 08

## ANALYSIS OF EXPENSES.

## CLASS 1.—Maintenance of Way and Buildings.

Repairs of road way and track, - - - - -	}	\$2,600 00
Renewals of rails, - - - - -		
Renewals of ties, - - - - -		
Repairs of bridges, including culverts and cattle guards, - - - - -		
Repairs of fences, road crossings, and signs, - - - - -		
Repairs of buildings, - - - - -		
Total, - - - - -		<u>\$2,600 00</u>

CLASS 2.—*Maintenance of Motive Power and Cars.*

Repairs of locomotives, - - - - -	}	\$2,093 48
Repairs of passenger cars, - - - - -		
Repairs of freight cars, - - - - -		
Total, - - - - -		\$2,093 48

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	}	\$11,253 29
Water supply, - - - - -		
Oil and waste, - - - - -		
Locomotive service, - - - - -		
Passenger train service, - - - - -		
Passenger train supplies, - - - - -		
Mileage of passenger cars, - - - - -		
Freight train service, - - - - -		
Freight train supplies, - - - - -		
Mileage of freight cars, - - - - -		
Telegraph expenses (maintenance and operating), - - - - -		
Damage and loss of freight and baggage, - - - - -		
Damages to property and cattle, - - - - -		
Personal injuries, - - - - -		
Agents and station service, - - - - -		
Station supplies, - - - - -		
Total, - - - - -		\$11,253 29

CLASS 4.—*General Expenses.*

Salaries of the general officers of the company, - - - - -	}	\$3,214 31
Salaries of clerks in general offices, - - - - -		
Law expenses, - - - - -		
Insurance, - - - - -		
Stationery and printing, - - - - -		
Outside agencies and advertising, - - - - -		
Contingencies, - - - - -		
Taxes, - - - - -		
Total, - - - - -		\$3,214 31

## RECAPITULATION OF EXPENSES.

	Per Cent of Expenses.	
Maintenance of way and buildings, - - - - -	13.56	\$2,600 00
Maintenance of motive power and cars, - - - - -	10.81	2,093 48
Conducting transportation, - - - - -	58.86	11,253 29
General expenses, including taxes, - - - - -	16.77	3,214 31
Total operating expenses, and taxes, - - - - -	100.00	\$19,161 08
Operating expenses and taxes per mile of road, - - - - -		\$1,741 91
Proportion of operating expenses for Michigan, main line, - - - - -	1,741 91	
Total, proportion of expenses for Michigan, - - - - -		1,741 91

Percentage of expenses to earnings,—95%.

Net earnings per mile of road \$81 82

#### DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From point in Elk township, Lake county, to Pere Marquette river, Aug.  
20, 1880.

#### MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Elk to Pere Marquette river,	11.00	
Total length completed,		11.00
Total length of road belonging to this company,		11.00
Total length of road belonging to this company in Michigan,	11.00	

Gauge of track, 4 feet 8½ inches.

	Total Miles.	In Michigan.
Total miles operated by the company,	11.00	11.00

#### Number of Bridges and Trestles in Michigan.

Wooden bridges, number of,	2;	aggregate length, feet,	650
Total,	2;		650

#### Crossings—Railroad and Highway.

What railroads cross your road at grade in this State, and at what locality?

Flint & Pere Marquette railroad, near Branch station.

Are your frogs and guard rails blocked as required by act  
174, session laws of 1883,

Yes.

#### Stations.

Number of stations on whole line,	2
Same in Michigan,	2

#### Employees.

Number of persons regularly employed on all roads operated by company, including officials,	23
Same in Michigan,	23

Classify your employes as per following list:

	Number.
Brakemen,	6
Engineers,	3
Firemen,	3
Laborers,	9
Shopmen,	1
Others,	1

#### Road Bed and Track.

Number of track sections in Michigan,	1
Average length of sections,—miles,	11
Average number of men in each section gang,	6

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	3	\$12,000 00
Total, - - - - -	3	\$12,000 00
Logging cars, - - - - -	40	4,000 00
Total, - - - - -	43	\$16,000 00

## MILEAGE, TRAFFIC, ETC.

*Freight Forwarded at Michigan Stations.*

	Tons.
Lumber and forest products, - - - - -	802,441
Total forwarded, - - - - -	802,441

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Lumber and forest products, - - - - -	80,244	100.00
Total tons carried, - - - - -	80,244	100.00

STATE OF MICHIGAN, }  
COUNTY OF MASON, } ss.

John S. Woodruff, and Lucius K. Baker, of the Lake County Railroad Company, being duly sworn, depose and say that they have caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declare them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of their knowledge and belief.

Signed,

[ L. S. OF R. R. ]

JNO. S. WOODRUFF.

L. K. BAKER.

Subscribed and sworn to before me this 31st day of May A. D. 1890.

WILLIAM FOY, *Notary Public.*



ANNUAL REPORT  
OF THE  
HECLA & TORCH LAKE RAILROAD COMPANY,

*For the Year Ending December 31, 1889.*

[Filed June 17, 1890.]

OFFICERS OF THE COMPANY, WITH LOCATION OF OFFICES.

*President*, ALEX. AGASSIZ, Boston, Mass.

*Secretary and Treasurer*, JOHN HEEBNER, Calumet, Mich.

*Superintendent*, W. A. CHILDS, Calumet, Mich.

DIRECTORS.

ALEX. AGASSIZ, Cambridge, Mass.

Q. A. SHAW, W. Roxbury, Mass.

S. B. WHITING, Cambridge, Mass.

JAS. N. WRIGHT, Calumet, Mich.

JOHN DUNCAN, Calumet, Mich.

Terms expire June, 1890.

STOCKHOLDERS, STOCK, AND GENERAL OFFICES.

When chartered or articles of association filed,—1867.

Number of stockholders at date of last election,	-	-	-	-	-	-	6
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Number of stockholders in Michigan at same date,	-	-	-	-	-	-	2
--	---	---	---	---	---	---	---

Amount of full paid stock held in Michigan at same date,	-	-	-	-	-	\$200
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Date of annual meeting of stockholders,—Third Wednesday in June.

Fiscal year of company ends,—April 30.

General offices of the company are located at Calumet, Mich.

REMARKS.

The road is operated and wholly owned by the Calumet & Hecla Mining Company, which pays any deficit that may occur for the privilege of having its ore transported free.

## GENERAL EXHIBIT.

	DEBIT.	CREDIT.
Total income,		\$97,454 56
Total expenses, including taxes,	\$97,454 56	

## ANALYSIS OF CAPITAL STOCK.

Amount authorized by charter or articles of association,	\$150,000 00
Par value of shares,	\$100 00
No. of shares issued,	1,000
Amount paid in on common,	\$100,000 00
Total amount paid in as per books of the company,	100,000 00
Paid in per mile of road owned by company,	
—7.50 miles,	\$13,333 33

## ANALYSIS OF DEBT ACCOUNTS.

## FUNDED DEBT.

Unfunded debt,	None.
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## UNFUNDED DEBT.

For construction,	\$407,249 60
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## RECAPITULATION.

Total unfunded debt,	\$407,249 60
Total debt liabilities,	\$407,249 60
Amount of debt liabilities per mile of road,—7.50 miles,	54,299 95
Total amount of stock and debt,	507,249 60
Stock and debt per mile of road,—7.50 miles,	67,633 28

## GENERAL BALANCE SHEET.—Dr.

Construction and equipment account,	\$507,249 60
Total,	\$507,249 60

## GENERAL BALANCE SHEET.—Cr.

Capital stock,	\$100,000 00
Unfunded debt:	
Vouchers and accounts,	407,249 60
Total,	\$507,249 60

## COST OF ROAD AND EQUIPMENT.

*Total Cost for Construction and Equipment of Road, and Branches Built by Company.*

Total expended for equipment,	\$507,249 60
Average cost per mile of road not including sidings,—7.50 miles,	67,633 28
Proportion of cost for Michigan,	507,249 60

## ANALYSIS OF EARNINGS.

## FREIGHT EARNINGS.

## Main line and branches:

Local traffic, - - - - -	\$97,454 56	
Total freight department earnings, - - - - -		\$97,454 56
Proportion for Michigan, - - - - -	\$97,454 56	
Per train mile, - - - - -	2 00	
Per mile of road, - - - - -	12,993 94	
Total transportation earnings, - - - - -		\$97,454 56
Transportation earnings per mile of road, - - - - -	\$12,993 94	
Transportation earnings per train mile, - - - - -	2 00	
Total earnings from operation of road, - - - - -		\$97,454 56
Total earnings per mile of road,—7.50 miles, - - - - -	\$12,993 94	
Total earnings per train mile, - - - - -	2 00	
Proportion of taxable earnings for Michigan, - - - - -		\$97,454 56
Total taxable earnings per mile of road in Michigan,—7.50 miles, - - - - -	\$12,993 94	
Total income from all sources, - - - - -		\$97,454 56
Proportion of income for Michigan, - - - - -		97,454 56

## ANALYSIS OF EXPENSES.

CLASS 1.—*Maintenance of Way and Buildings.*

Repairs of road way and track, - - - - -	\$13,151 73
Renewals of ties, - - - - -	500 00
Repairs of fences, road crossings and signs, - - - - -	290 59
Total, - - - - -	\$13,942 32

CLASS 3.—*Conducting Transportation.*

Fuel for locomotives, - - - - -	\$17,758 18
Freight train service, - - - - -	52,118 50
Freight train supplies, - - - - -	11,110 61
Total, - - - - -	\$80,987 29

CLASS 4.—*General Expenses.*

Taxes, - - - - -	\$2,524 95
Total, - - - - -	\$2,524 95

## RECAPITULATION OF EXPENSES.

Maintenance of way and buildings, - - - -	\$13,942 32
Maintenance of motive power and cars, - - - -	} 80,987 29
Conducting transportation, - - - -	
General expenses, including taxes, - - - -	2,524 95
Total operating expenses and taxes, - - - -	<u>\$97,454 56</u>
Operating expenses and taxes per mile of road, \$12,993 94	
Operating expenses and taxes per train mile run,	
for trains earning revenue,—48,465 miles, 2 00	
Proportion of operating expenses and taxes	
for Michigan, main line, - - - - 97,454 56	
Total proportion of expenses for Michigan, - - - -	<u>\$97,454 50</u>
Percentage of expenses to earnings, 100%.	

## DESCRIPTION OF ROAD.

Date when the road was opened for use between its present termini:  
From Calumet to Lake Linden, October, 1868.

## MAIN LINE.

	Miles. 100ths.	Miles. 100ths.
In Michigan, from Calumet to Lake Linden, - - -	6.00	
Total length completed, - - - - -		6.00
Total length of branches owned by company, - - -		1.50
Total length of branches owned by company in Michigan, - - - - -	1.50	
Total length of road belonging to this company, - - -		<u>7.50</u>
Total length of road belonging to this company in Michigan, - - - - -	7.50	
Aggregate length of tracks in Michigan belonging to this company computed as single track, - - -		<u>7.50</u>
Gauge of track, 4 feet, 1 inch.		
Total miles operated by the company, - - - -	Total Miles. 7.50	In Michigan. 7.50

## Number of Bridges and Trestles in Michigan.

Wooden trestles, number of, 5; aggregate length, feet,	1,500
Total, - - - - 5; - - - -	<u>1,500</u>

## Crossings—Railroad and Highway.

What railroads cross your road at grade in this State and at what locality?  
Mineral Range railroad at Calumet.  
Hancock & Calumet railroad at Calumet.

1889.]

## HECLA &amp; TORCH LAKE RAILROAD CO.

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Number of crossings of highways at grade in this State,	7
Number of crossings of highways at grade in this State at which there are gates or flagmen, - - - - -	2

*Stations.*

Number of stations on whole line, - - - - -	2
Same in Michigan, - - - - -	2

*Employees.*

Number of persons regularly employed on all roads operated by company, including officials, - - - - -	136
Same in Michigan, - - - - -	136

Classify your employees as per following list:

	Number.
Brakemen, - - - - -	12
Conductors, - - - - -	4
Engineers, - - - - -	6
Fireman, - - - - -	6
Laborers, - - - - -	82
Shopmen, - - - - -	10
Yardmen, - - - - -	10
Others, - - - - -	6

## REPAIRS AND RENEWALS.

*Fencing in Michigan.*

How many miles of fencing have you? - - - - -	15
---	----

*Road Bed and Track.*

Number of track sections in Michigan, - - - - -	3
Average length of sections,—miles, - - - - -	2
Average number of men in each section gang, - - - - -	6
Number of new ties put in whole line during the year, -	2,000

## ROLLING STOCK.

	Number.	Present Estimated Value.
Number of locomotives of more than 30 tons weight, exclusive of tender, - - - - -	8	\$76,000 00
Number of locomotives of 20 to 30 tons weight, exclusive of tender, - - - - -	1	8,000 00
Total, - - - - -	9	\$84,000 00
Number of passenger cars—8 wheel, including official cars, - - - - -	1	500 00
Number of box freight cars, - - - - -	4	1,000 00
Number of platform cars, - - - - -	63	15,000 00
Number of ore cars, - - - - -	248	60,000 00
Number of conductors' way cars, - - - - -	3	700 00
Other cars, - - - - -	4	1,000 00
Total, - - - - -	332	\$162,200 00

Number of locomotives equipped with power brakes, None.  
 Number of passenger-train cars equipped with power brakes, None.  
 Number of freight cars equipped with power brakes, None.  
 Are your freight cars being equipped with automatic couplers as required by Act No. 147, Session Laws of 1885? No. Cars have always safety couplers.  
 What pattern or patterns have you adopted for use? Childs; cars couple after deadwoods meet; no danger to brakeman in making or unmaking couplings.

## MILEAGE TRAFFIC, ETC.

*Train Mileage.*

Miles run by freight trains during the year,	48,465
Total mileage of trains earning revenue,	48,465

*Freight Traffic.*

	Numbers and Quantities.	Miles.	Rate. Dollars. Cents.
Number of tons of local freight carried,	921,900		
Total tons of freight carried,	921,900		
Total mileage of local freight,		48,465	
Total freight mileage, or tons carried one mile,		69,142	50

*Freight Forwarded at Michigan Stations.*

	Tons.
Grain,	300
Lumber and forest products,	30,000
Coal,	33,000
Plaster, lime and cement,	600
Other iron and castings,	1,000
Ores,	845,000
Stone, brick and sand,	3,000
Merchandise and other articles not enumerated above,	3,000
Total tons carried,	915,900

*Tonnage of Articles Transported.—Entire Road.*

	Tons.	Per Cent.
Grain,	300	
Lumber and forest products,	30,000	
Coal,	33,000	
Plaster, lime and cement,	600	
Iron and castings,	1,000	
Ores (copper rock),	845,000	
Stone, brick and sand,	3,000	
Merchandise and other articles not enumerated above,	3,000	
Total tons carried,	915,900	100.00

## REPORT OF ACCIDENTS FOR MICHIGAN DURING THE YEAR 1889.

## KILLED.

December 10, Annie Kohmeir, grade crossing near Torch Lake. Apparent absent mindedness of 15 years old girl who was attempting to cross track ahead of moving train.

## INJURED.

Injured, - - - - - None.

## TABULAR STATEMENT OF ACCIDENTS IN MICHIGAN.

Cause of Accident.	Killed.			Injured.		
	Passengers.	Employés.	Others.	Passengers.	Employés.	Others.
Collisions.....						
Coupling cars.....						
Derailments.....						
Falling from trains.....						
Frogs.....						
Getting on and off trains.....						
Highway crossings.....			1			
Miscellaneous.....						
Overhead obstructions.....						
Trespassers on trains.....						
Trespassers on tracks.....						
Total.....			1			

## SUMMARY OF ACCIDENTS IN MICHIGAN.

Number of persons killed during the year,	- - -	1
Number of persons injured during the year,	- - -	-
Number of casualties purely accidental,	- - -	1
Number resulting from lack of caution, carelessness, or misconduct,	- - -	-
Persons killed or injured while intoxicated,	- - -	-
Trespassers and tramps killed or injured,	- - -	-
Suicides,	- - -	-

## CLASSIFICATION OF EMPLOYES.

## KILLED OR INJURED IN MICHIGAN.

Employés.	Killed.	Injured.	Total.
Baggagemen.....			
Brakemen.....			
Conductors.....			
Engineers.....			
Firemen.....			
Laborsers.....			
Shopmen.....			
Yardmen.....			
Not classified above.....			
Total.....			

STATE OF MICHIGAN, }  
COUNTY OF HOUGHTON, } ss.

John Heebner, Secretary of the Hecla & Torch Lake Railroad Company, being duly sworn deposes and says that he has caused the foregoing statements to be prepared by the proper officers and agents of this company, and having carefully examined the same, declares them to be a true, full, and correct statement of the condition and affairs of said company, on the thirty-first day of December, A. D. 1889, to the best of his knowledge and belief.

[L. S. OF R. R.]

Signed,

JOHN HEEBNER.

Subscribed and sworn to before me this 10th day of June, A. D. 1890.

L. W. KILLMAR, *Notary Public.*



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TABLES

ACCOMPANYING

THE EIGHTEENTH ANNUAL REPORT

OF THE

COMMISSIONER OF RAILROADS.

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MICHIGAN,--1890.

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COMPILED BY

WYLLYS G. RANSOM,

DEPUTY RAILROAD COMMISSIONER.

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# TABLES

## ACCOMPANYING THE EIGHTEENTH ANNUAL REPORT OF THE COMMISSIONER OF RAILROADS.

### STATE OF MICHIGAN, 1890.

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## MICHIGAN RAILROAD RETURNS.

## 1.—GENERAL EXHIBIT.—REVENUE AND DISBURSEMENTS.

Line No.	Railroads.	Total Revenue from Operation.	Total Operating Expenses, Including Taxes.	Net Result from
				Surplus.
1	Battle Creek & Sturgis	b \$9,415 23	\$8,808 28	\$1,207 00
2	Bay City & Battle Creek			
3	Chicago, Detroit & C. G. T. Junction	250,029 11	237,308 70	12,722 41
4	Chicago & Grand Trunk	3,732,773 42	2,904,668 79	828,106 63
5	Chicago, Kalamazoo & Saginaw	34,330 63	17,148 99	17,181 64
6	Chicago & Northwestern	26,186,280 82	16,807,710 37	9,877,570 45
7	Chicago & West Michigan	1,374,833 30	1,018,465 79	356,367 51
8	Cincinnati, Jackson & Mackinaw	623,453 46	458,004 54	70,459 92
9	Cin. Jack. & Mack., W. H. Brown, Receiver	94,974 98	78,024 82	16,950 16
10	Cincinnati, Wabash & Michigan	584,062 59	377,018 68	156,448 06
11	Detroit, Bay City & Alpena	437,209 43	290,781 37	196,418 06
12	Detroit, Grand Haven & Milwaukee	1,076,612 71	822,362 81	253,629 90
13	Detroit, Lansing & Northern	1,181,985 91	806,924 02	325,061 89
14	Grand Rapids, Lansing & Detroit			
15	Saginaw & Western			
16	Duluth, South Shore & Atlantic	1,976,350 38	1,161,515 28	814,835 10
17	Marquette, Houghton & Ontonagon			
18	Marquette & Western			
19	Flint & Pere Marquette	2,332,279 60	1,552,164 83	780,115 27
20	Manistee			
21	Fort Huron & Northwestern			
22	Saginaw & Clare County			
23	Saginaw & Mt. Pleasant			
24	Frankfort & Southeastern			
25	Grand Rapids & Indiana	d 2,495,732 90	1,670,358 62	825,379 28
26	Hancock & Calumet	184,657 44	78,044 08	56,613 41
27	Lake Shore & Michigan Southern System	19,487,196 74	12,947,451 57	6,639,745 17
28	Detroit, Hillsdale & Southwestern			
29	Detroit, Monroe & Toledo			
30	Fort Wayne & Jackson			
31	Kalamazoo, Allegan & Grand Rapids			
32	Kalamazoo & White Pigeon			
33	Northern Central Michigan			
34	Lowell & Hastings	3,976 72	3,976 72	
35	Manistee & Northeastern	46,620 09	44,108 63	2,516 26
36	Manistique	44,685 99	24,397 82	20,288 17
37	Mason & Oceana	39,599 30	39,213 10	386 70
38	Michigan Air Line railway	152,640 45	130,574 35	22,066 10
39	Michigan Central System	13,786,925 16	9,895,158 32	3,891,766 84
40	Canada Southern Bridge			
41	Detroit & Bay City			
42	Grand River Valley			
43	Jackson, Lansing & Saginaw			
44	Kalamazoo & South Haven			
45	Michigan Air Line railroad			
46	Michigan Midland & Canada			
47	Saginaw Bay & Northwestern			
48	Toledo, Canada Southern & Detroit			
49	Milwaukee, Lake Shore & Western	3,474,667 29	1,954,208 97	1,520,463 32
50	Milwaukee & Northern	1,231,091 33	833,912 01	392,179 32
51	Mineral Range	109,775 06	61,930 23	47,844 83
52	Minneapolis, St. Paul & Sault Ste. Marie	1,651,412 11	1,063,066 75	588,345 36
53	Muskegon, Grand Rapids & Indiana			
54	Ontonagon & Brule River	5,730 43	11,092 44	
55	Pontiac, Oxford & Northern	102,068 27	91,331 66	10,236 61
56	Saginaw, Tuscola & Huron	106,994 22	77,029 41	29,964 81
57	Saginaw Valley & St. Louis	96,813 70	57,959 62	38,853 08
58	Saginaw & Grand Rapids			
59	Toledo, Ann Arbor & North Michigan	1,014,306 98	663,130 69	346,176 29
60	Toledo, Saginaw & Muskegon	91,870 24	89,598 98	1,976 26

a Sinking funds.

b For four months only.

c Interest on guaranteed stock \$53,350. Interest for six branch roads \$507,645.40.

# TABULAR STATEMENT.

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## REVENUE AND DISBURSEMENTS.—CONTINUED.

Year's Business.	Payable from Income.					Line No.
Deficit.	Interest on the Funded Debt.	Interest on the Floating Debt.	Rentals, Etc.	Dividends.	Total.	
			\$846 05		\$846 05	1
	\$95,700 00			\$43,800 00	109,500 00	2
	659,984 47	\$27,489 57	109,453 24		796,877 28	3
						4
	5,544,827 12		202,570 00	3,444,504 00	9,192,001 12	5
						6
	237,846 60			123,004 00	360,850 60	7
	188,953 20	2,130 78	15,977 53		187,080 51	8
			2,721 45		2,721 45	9
	45,224 59	589 86			45,814 45	10
	150,000 00				150,000 00	11
	312,000 00	13,307 91	21,429 56		346,737 47	12
						13
	237,112 22	4,987 07	89,675 00		331,774 29	14
						15
	519,352 00	132,963 21	22,317 09	196,707 86	871,339 06	16
						17
						18
	444,062 28	12,147 82	95,299 01	380,520 00	932,029 06	19
						20
						21
						22
						23
						24
	765,925 00	71,052 67	6,000 00		842,977 67	25
	15,000 00	1,308 54			16,308 54	26
						27
	3,245,015 00	560,995 40		2,473,325 00	6,279,335 40	28
						29
						30
						31
						32
						33
						34
		31,827 53			31,827 53	35
		2,215 89			2,215 89	36
				7,413 76	7,413 76	37
	75,453 84				75,453 84	38
						39
	1,080,000 00		1,839,971 06	936,910 20	3,856,881 26	40
						41
						42
						43
						44
						45
						46
						47
						48
						49
	671,499 39		86,763 57	490,000 00	1,248,262 96	50
	281,790 00	6,227 88	22,598 63		310,556 51	51
			184 72		184 72	52
	962,124 86		84,976 86		1,047,101 72	53
						54
\$5,362 01						55
						56
	11,400 00	22,927 87	10,122 94		44,450 81	57
	35,690 00		7,000 00		42,690 00	58
						59
	294,800 00	7,951 84	10,122 94		312,874 78	60
	44,412 50		779 42		45,191 92	

<sup>d</sup> Includes Muskegon, Grand Rapids & Indiana and Traverse City Railways.

<sup>e</sup> Included with Grand Rapids & Indiana.

## MICHIGAN RAILROAD RETURNS.

## 1.—REVENUE AND DISBURSEMENTS.—CONTINUED.

Line No.	Railroads.	Total Revenue from Operation.	Total Operating Expenses, Including Taxes.	Net Result from
				Surplus.
61	Toledo & South Haven.....	\$24,182 98	\$14,243 31	\$9,939 67
62	Traverse City.....	0		
63	Wabash.....	10,094,875 48	7,330,539 64	2,764,335 84
64	Wisconsin Central.....	2,013,085 13	1,874,484 98	638,610 15
65	Detroit Union Railroad Depot & Station Co.....	127,752 71	40,546 87	87,205 84
	Total for commercial roads.....	\$96,085,264 79	\$64,848,672 87	\$31,241,953 93
	ORE AND FOREST ROADS.			
1	Bear Lake & Eastern.....	\$10,708 61	\$5,962 97	\$4,745 64
2	Buckley & Douglas.....			
3	Crawford & Manistee River.....	14,735 86	14,537 71	198 15
4	Grass Lake & Manistee River.....	12,787 32	13,902 96	
5	Hecla & Torch Lake.....	97,454 56	97,454 56	
6	Hobart & Manistee River.....	\$3,281 73	\$0,781 78	1,500 00
7	Lake County.....	20,061 08	19,161 08	900 00
8	Manistee & Luther.....	187,398 23	74,255 11	63,133 12
9	North Branch & Sauble River.....	12,399 44	9,168 29	\$ 226 15
	Total for ore and forest roads.....	\$337,908 83	\$265,119 11	\$73,708 06
	Total for all roads.....	\$96,423,071 62	\$64,613,791 98	\$31,815,656 99

## 2.—GENERAL EXHIBIT.—STATEMENT OF BALANCES.

Line No.	RAILROADS.	Balances December 31, 1899.	
		Debit.	Credit.
1	Battle Creek & Sturgis.....		\$360 95
2	Bay City & Battle Creek.....		
3	Chicago, Detroit & C. G. T. Junction.....	\$98,777 59	
4	Chicago & Grand Trunk.....		131,229 35
5	Chicago, Kalamazoo & Saginaw.....		17,181 64
6	Chicago & Northwestern.....		685,569 33
7	Chicago & West Michigan.....	4,483 09	
8	Cincinnati, Jackson & Mackinaw.....	86,601 59	
9	Cincinnati, Jackson & Mackinaw—W. H. Brown, Receiver.....	-	14,228 71
10	Cincinnati, Wabash & Michigan.....		110,634 21
11	Detroit, Bay City & Alpena.....		46,418 06
12	Detroit, Grand Haven & Milwaukee.....	93,107 57	
13	Detroit, Lansing & Northern.....	6,712 40	
14	Grand Rapids, Lansing & Detroit.....		
15	Saginaw & Western.....		
16	Duluth, South Shore & Atlantic.....	56,504 56	
17	Marquette, Houghton & Ontonagon.....		
18	Marquette & Western.....		
19	Flint & Pere Marquette.....	105 57	
20	Manistee.....		
21	Port Huron & Northwestern.....		
22	Saginaw & Clare County.....		
23	Saginaw & Mt. Pleasant.....		
24	Frankfort & Southeastern.....		
25	Grand Rapids & Indiana.....	17,598 39	
26	Hancock & Calumet.....		40,304 87

# TABULAR STATEMENT.

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## REVENUE AND DISBURSEMENTS.—CONTINUED.

Year's Business.		Payable from Income.				Line No.
Deficit.	Interest on the Funded Debt.	Interest on the Floating Debt.	Rentals, Etc.	Dividends.	Total.	
	\$12,960 00	\$231 96			\$13,341 96	61
	2,138,393 32		\$981,671 15		3,070,064 47	62
	580,655 77	151,210 23	606,390 93		1,338,256 93	63
						64
						65
\$5,362 01	\$18,571,090 61	\$1,049,566 03	\$4,166,871 15	\$8,096,184 32	\$31,863,712 11	
	\$484 05	\$746 04			\$1,230 09	1
						2
\$1,015 34						3
						4
						5
						6
						7
						8
						9
\$1,015 34	\$484 05	\$746 04			\$1,230 09	
\$6,877 35	\$18,571,574 66	\$1,050,312 07	\$4,166,871 15	\$8,096,184 32	\$31,864,942 20	

## STATEMENT OF BALANCES.—CONTINUED.

Balances Forward from 1888.		Taken to Account other than for Traffic.		Balances Forward to 1890.		Line No.
Debit.	Credit.	Debit.	Credit.	Debit.	Credit.	
					\$360 95	1
			\$96,777 59			2
		\$181,229 35				3
	\$11,784 49				23,966 13	4
	5,636,730 61				6,522,269 94	5
						6
	234,026 06		6,945 61		236,488 60	7
	84,461 73	12,179 64	169 78	\$14,149 72		8
					14,228 71	9
	389,690 75				500,314 96	10
	29,268 01		93,107 57		75,686 07	11
						12
	64,307 10				57,594 70	13
						14
	51,351 66		2,338 00	2,314 90		15
						16
						17
	552 49				446 82	18
						19
						20
						21
						22
						23
						24
175,800 43		10,780 62		204,179 44		25
	56,736 01				97,040 88	26

## MICHIGAN RAILROAD RETURNS.

## 2.—GENERAL EXHIBIT.—STATEMENT OF BALANCES.—CONTINUED.

Line No.	Railroads.	Balances December 31, 1889.	
		Debit.	Credit.
27	Lake Shore & Michigan Southern System.....		\$380,409 77
28	Detroit, Hillsdale & Southwestern.....		
29	Detroit, Monroe & Toledo.....		
30	Fort Wayne & Jackson.....		
31	Kalamazoo, Allegan & Grand Rapids.....		
32	Kalamazoo & White Pigeon.....		
33	Northern Central Michigan.....		
34	Lowell & Hastings.....		
35	Manistee & Northeastern.....	\$29,311 27	
36	Manistiquie.....		18,072 28
37	Mason & Oceana.....	7,082 06	
38	Michigan Air Line Railway.....	53,367 24	
39	Michigan Central System.....		34,885 53
40	Canada Southern Bridge.....		
41	Detroit & Bay City.....		
42	Grand River Valley.....		
43	Jackson, Lansing & Saginaw.....		
44	Kalamazoo & South Haven.....		
45	Michigan Air Line R. R.....		
46	Michigan Midland & Canada.....		
47	Saginaw Bay & Northwestern.....		
48	Toledo, Canada Southern & Detroit.....		
49	Milwaukee, Lake Shore & Western.....		272,200 36
50	Milwaukee & Northern.....		81,622 81
51	Mineral Range.....		47,660 11
52	Minneapolis, St. Paul & Sault Ste. Marie.....	458,756 36	
53	Muskegon, Grand Rapids & Indiana.....		
54	Ontonagon & Brule River.....	5,362 01	
55	Pontiac, Oxford & Northern.....		10,286 61
56	Saginaw, Tuscola & Huron.....	4,373 06	
57	Saginaw Valley & St. Louis.....	3,624 92	
58	Saginaw & Grand Rapids.....		
59	Toledo, Ann Arbor & North Michigan.....		33,301 51
60	Toledo, Saginaw & Muskegon.....	43,215 64	
61	Toledo & South Haven.....	3,302 29	
62	Traverse City.....		
63	Wabash.....		305,738 63
64	Wisconsin Central.....		
65	Detroit, Union R. R. Depot & Station Co.....	397,226 32	
	Total commercial roads.....	\$1,367,661 98	\$2,210,044 78
	ORE AND FOREST ROADS.		
1	Bear Lake & Eastern.....		\$3,515 55
2	Buckley & Douglas.....		
3	Crawford & Manistee River.....		198 15
4	Grass Lake & Manistee River.....	\$1,015 84	
5	Hecla & Torch Lake.....		
6	Hobart & Manistee River.....		1,500 00
7	Lake County.....		900 00
8	Manistee & Luther.....		52,840 99
9	North Branch & Sauble River.....		3,226 15
	Total ore and forest roads.....	\$1,015 84	\$62,180 84
	Total for all roads.....	\$1,368,677 27	\$2,272,225 62

<sup>a</sup> Included with G. R. & I.

<sup>b</sup> First report.

<sup>c</sup> Road abandoned and track taken up.



# TABULAR STATEMENT.

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## STATEMENT OF BALANCES.—CONTINUED.

Balance Forward from 1888.		Taken to Account other than for Traffic.		Balances forward to 1890.		Line No.
Debit.	Credit.	Debit.	Credit.	Debit.	Credit.	
	\$10,649,801 67		\$382,541 49		\$11,892,752 98	27
						28
						29
						30
						31
						32
						33
						34
				\$29,311 27		35
	31,152 04				49,224 82	36
	7,082 06		53,867 24			37
						38
	7,097,584 70	\$405,478 85	46,665 66		6,778,612 59	39
						40
						41
						42
						43
						44
						45
						46
						47
						48
	194,927 82		15,298 98		482,422 11	49
	213,061 28				294,794 09	50
	186,488 78				184,148 84	51
709,586 98		7,478 71		1,175,567 00		52
14,999 77				20,861 78		53
					10,286 61	54
42,156 09				46,529 15		55
97,259 08			456 00	100,627 96		56
	72,847 96				106,149 47	57
27,628 28				71,048 87		58
5,866 29				8,668 58		59
188,174 07		409,028 58		288,474 02		60
188,178 80			346,288 20	189,116 92		61
						62
						63
						64
						65
\$1,896,069 64	\$25,161,755 19	\$976,165 25	\$1,044,451 07	\$2,150,344 66	\$26,526,668 82	
	\$11 84				\$3,526 89	1
	7,184 76				7,882 91	2
	5,177 63				4,162 29	3
						4
						5
\$17,188 55				\$15,638 55		6
	10,100 00				11,000 00	7
	110,527 09				163,368 08	8
					8,226 15	9
\$17,188 55	\$188,000 82			\$15,638 55	\$192,666 82	
\$1,418,288 19	\$25,294,756 01	\$976,165 25	\$1,044,451 07	\$2,165,983 15	\$27,019,835 14	

## MICHIGAN RAILROAD RETURNS.

## 2.—GENERAL EXHIBIT.—STATEMENT OF BALANCES.—CONTINUED.

Line No.	Railroads.	Balances December 31, 1899.	
		Debit.	Credit.
27	Lake Shore & Michigan Southern System.....		\$360,400 77
28	Detroit, Hillsdale & Southwestern.....		
29	Detroit, Monroe & Toledo.....		
30	Fort Wayne & Jackson.....		
31	Kalamazoo, Allegan & Grand Rapids.....		
32	Kalamazoo & White Pigeon.....		
33	Northern Central Michigan.....		
34	Lowell & Hastings.....		
35	Manistee & Northeastern.....	\$29,311 27	
36	Manistique.....		18,072 28
37	Mason & Oceana.....	7,082 06	
38	Michigan Air Line Railway.....	58,867 24	
39	Michigan Central System.....		\$4,865 58
40	Canada Southern Bridge.....		
41	Detroit & Bay City.....		
42	Grand River Valley.....		
43	Jackson, Lansing & Saginaw.....		
44	Kalamazoo & South Haven.....		
45	Michigan Air Line R. R.....		
46	Michigan Midland & Canada.....		
47	Saginaw Bay & Northwestern.....		
48	Toledo, Canada Southern & Detroit.....		
49	Milwaukee, Lake Shore & Western.....		272,200 36
50	Milwaukee & Northern.....		81,622 81
51	Mineral Range.....		47,660 11
52	Minneapolis, St. Paul & Sault Ste. Marie.....	458,756 36	
53	Muskegon, Grand Rapids & Indiana.....		
54	Ontonagon & Brule River.....	5,862 01	
55	Pontiac, Oxford & Northern.....		10,286 61
56	Saginaw, Tuscola & Huron.....	4,373 06	
57	Saginaw Valley & St. Louis.....	3,624 92	
58	Saginaw & Grand Rapids.....		
59	Toledo, Ann Arbor & North Michigan.....		33,301 51
60	Toledo, Saginaw & Muskegon.....	48,215 64	
61	Toledo & South Haven.....	3,302 29	
62	Traverse City.....		
63	Wabash.....		305,728 63
64	Wisconsin Central.....		
65	Detroit, Union R. R. Depot & Station Co.....	397,226 32	
	Total commercial roads.....	\$1,367,661 98	\$2,210,044 78
	ORE AND FOREST ROADS.		
1	Bear Lake & Eastern.....		\$3,515 55
2	Buckley & Douglas.....		
3	Crawford & Manistee River.....		198 15
4	Grass Lake & Manistee River.....	\$1,015 84	
5	Hecla & Torch Lake.....		
6	Hobart & Manistee River.....		1,500 00
7	Lake County.....		900 00
8	Manistee & Luther.....		52,840 99
9	North Branch & Sauble River.....		3,226 15
	Total ore and forest roads.....	\$1,015 84	\$62,180 84
	Total for all roads.....	\$1,368,677 27	\$2,272,225 62

<sup>a</sup> Included with G. R. & I.

<sup>b</sup> First report.

<sup>c</sup> Road abandoned and track taken up.

# TABULAR STATEMENT.

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## STATEMENT OF BALANCES.—CONTINUED.

Balance Forward from 1888.		Taken to Account other than for Traffic.		Balances forward to 1890.		Line No.
Debit.	Credit.	Debit.	Credit.	Debit.	Credit.	
	\$10,649,801 67		\$382,541 49		\$11,392,752 98	27
						28
						29
						30
						31
						32
						33
						34
				\$29,311 27		35
	31,152 04				49,224 32	36
	7,082 06		53,867 24			37
						38
	7,097,534 70	\$405,478 35	46,665 66		6,778,612 59	39
						40
						41
						42
						43
						44
						45
						46
						47
						48
	194,927 82		15,298 98		483,422 11	49
	218,061 28				294,794 09	50
	136,488 73				184,148 84	51
709,336 93		7,478 71		1,175,567 00		52
14,999 77				20,361 78		53
					10,236 61	54
42,156 09				46,529 15		55
97,259 08			456 00	100,627 96		56
						57
	72,847 96				106,149 47	58
27,828 23				71,048 87		59
5,866 29				8,668 58		60
185,174 07		409,028 58		288,474 02		61
188,178 80			346,288 20	189,116 92		62
						63
						64
						65
\$1,396,099 64	\$25,161,755 19	\$976,165 25	\$1,044,451 07	\$2,150,344 66	\$26,826,668 82	
	\$11 84				\$3,526 89	1
	7,184 76				7,382 91	2
	5,177 68				4,162 29	3
						4
\$17,188 55				\$15,638 55		5
	10,100 00				11,000 00	6
	110,527 09				168,868 08	7
					3,226 15	8
						9
\$17,188 55	\$183,000 82			\$15,638 55	\$192,666 32	
\$1,418,288 19	\$25,294,756 01	\$976,165 25	\$1,044,451 07	\$2,165,963 15	\$27,019,335 14	

## 3.—CAPITAL STOCK.

Line No.	Railroads.	Amount Authorized.	Par Value of Shares.	Number of Shares Issued.
1	Battle Creek & Sturgis.....	\$1,000,000 00	\$100 00	5,000
2	Bay City & Battle Creek.....	1,000,000 00	100 00	3,000
3	Chicago, Detroit & C. G. T. Junction.....	1,000,000 00	100 00	10,950
4	Chicago & Grand Trunk.....	6,000,000 00	100 00	66,000
5	Chicago, Kalamazoo & Saginaw.....	2,000,000 00	100 00	
6	Chicago & Northwestern.....	Unlimited.	100 00	748,153
7	Chicago & West Michigan.....	6,800,000 00	100 00	67,332
8	Cincinnati, Jackson & Mackinaw.....	20,850,000 00	100 00	162,808
9	Cincinnati, Saginaw & Mackinaw.....	b 2,500,000 00	100 00	
10	Cincinnati, Wabash & Michigan.....	Unlimited.	100 00	20,433
11	Detroit, Bay City & Alpena.....	2,000,000 00	100 00	16,700
12	Detroit, Grand Haven & Milwaukee.....	1,500,000 00	50 00	30,000
13	Detroit, Lansing & Northern.....	4,410,000 00	100 00	43,356
14	Grand Rapids, Lansing & Detroit.....	450,000 00	100 00	280
15	Saginaw & Western.....	675,000 00	100 00	45
16	Duluth, South Shore & Atlantic.....	22,000,000 00	100 00	220,000
17	Marquette, Houghton & Ontonagon.....	5,637,128 87	100 00	57,571
18	Marquette & Western.....	1,250,000 00	100 00	12,500
19	Flint & Pere Marquette.....	10,000,000 00	100 00	96,402
20	Manistee.....			
21	Port Huron & Northwestern.....			
22	Saginaw & Clare County.....			
23	Saginaw & Mt. Pleasant.....			
24	Frankfort & Southeastern.....	100,000 00	100 00	571
25	Grand Rapids & Indiana.....	5,000,000 00	100 00	49,800
26	Hancock & Calumet.....	350,000 00	100 00	3,500
27	Lake Shore & Michigan Southern.....	50,000,000 00	100 00	500,000
27½	Detroit & Chicago.....	1,000,000 00	100 00	10,000
28	Detroit, Hillsdale & Southwestern.....	1,350,000 00	100 00	
29	Detroit, Monroe & Toledo.....	414,100 00	100 00	4,141
30	Fort Wayne & Jackson.....	2,727,554 80	100 00	27,345
31	Kalamazoo, Allegan & Grand Rapids.....	610,000 00	100 00	6,100
32	Kalamazoo & White Pigeon.....	280,900 00	100 00	2,809
33	Northern Central Michigan.....	610,000 00	100 00	6,100
34	Lowell & Hastings.....	200,000 00	100 00	
35	Manistee & Northeastern.....	600,000 00	100 00	
36	Manistique.....	500,000 00	100 00	1,500
37	Mason & Oceana.....	150,000 00	100 00	1,500
38	Michigan Air Line railway.....	1,500,000 00	100 00	3,000
39	Michigan Central.....	Unlimited.	100 00	187,382
40	Canada Southern Bridge.....	1,500,000 00	100 00	4,500
41	Detroit & Bay City.....	2,000,000 00	100 00	20,000
42	Grand River Valley.....	1,000,000 00	50 00	9,284
43	Jackson, Lansing & Saginaw.....	2,500,000 00	100 00	20,000
44	Kalamazoo & South Haven.....	500,000 00	100 00	3,254
45	Michigan Air Line railroad.....	4,000,000 00	100 00	7,885
46	Michigan Midland & Canada.....	400,000 00	100 00	3,000
47	Saginaw Bay & Northwestern.....	800,000 00	100 00	2,000
48	Toledo, Canada Southern & Detroit.....	2,000,000 00	100 00	15,476
49	Milwaukee, Lake Shore & Western.....	10,000,000 00	100 00	70,000
50	Milwaukee & Northern.....	8,000,000 00	100 00	51,550
51	Mineral Range.....	400,000 00	100 00	3,917
52	Minneapolis, St. Paul & Sault Ste. Marie.....	21,000,000 00	100 00	210,000
53	Muskegon, Grand Rapids & Indiana.....	350,000 00	100 00	
54	Ontonagon & Brule River.....	1,000,000 00	100 00	
55	Pontiac, Oxford & Northern.....	1,000,000 00	100 00	10,000
56	Saginaw, Tuscola & Huron.....	800,000 00	100 00	1,233
57	Saginaw Valley & St. Louis.....	800,000 00	100 00	2,353
58	Saginaw & Grand Rapids.....	70,000 00	100 00	700
59	Toledo, Ann Arbor & North Michigan.....	5,800,000 00	100 00	53,000
60	Toledo, Saginaw & Muskegon.....	1,600,000 00	100 00	16,000

a Includes stock of proprietary roads.

# TABULAR STATEMENT.

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## CAPITAL STOCK.—CONTINUED.

Amount Paid in.						Stockholders.		Line No.
On Common.	On Preferred.	On Shares not Issued.	Total.	Per Mile of Road.	Amount Held in Michigan.	Whole No.	No. in Mich.	
\$500,000 00			\$500,000 00	\$12,048 19		11	None.	1
300,000 00			300,000 00	17,341 00		11	None.	2
978,984 87			978,984 87	18,443 65	\$100 00	23	1	3
6,600,000 00			6,600,000 00	20,214 40	137,800 00	280	18	4
		\$3,575 00	3,575 00	79 44				5
52,489,865 97	\$22,325,454 56		74,815,320 53	17,602 08	98,000 00	3,396	13	6
6,788,200 00		63,600 00	6,798,800 00	18,642 51	9,600 00	608	6	7
10,413,835 00	5,867,000 00		16,280,835 00	50,079 46	17,000 00	259	9	8
		1,071,922 30	1,071,922 30	17,385 84		6	6	9
2,044,058 76			2,044,058 76	12,434 05	4,000 00	40	3	10
1,670,000 00			1,670,000 00	7,978 21	1,670,000 00	9	8	11
1,500,000 00			1,500,000 00	7,983 51	250 00	11	5	12
1,825,600 00	2,510,000 00		4,335,600 00	19,587 63	10,500 00	481	1	13
28,000 00			28,000 00	504 14	None.	8		14
4,500 00			4,500 00	105 71		9		15
12,000,000 00	10,000,000 00		22,000,000 00	56,934 35	1,590,400 00	257	15	16
2,378,870 87	3,278,456 00		5,657,326 87	36,436 47	228,500 00	202	10	17
625,000 00	625,000 00		1,250,000 00	60,009 60		8		18
3,286,200 00	6,342,000 00		9,640,200 00	16,001 52	142,700 00	1,684	12	19
								20
								21
								22
57,100 00			57,100 00	2,546 46	800 00	7	3	23
4,986,081 22			4,986,081 22	12,206 18	Unknown.	675	273	24
350,000 00			350,000 00	17,190 57	100 00	11	1	25
49,466,500 00	533,500 00		50,000,000 00	57,812 16	21,100 00	3,264	29	26
1,000,000 00			1,000,000 00	14,792 90	1,000 00			27
1,350,000 00			1,350,000 00	20,505 52	1,700 00	11	1	28
414,100 00			414,100 00	6,640 47	100 00	2	1	29
2,291,421 52	496,133 28		2,787,554 80	27,880 55	196,300 00	310	9	30
610,000 00			610,000 00	10,441 00	206,600 00	92	14	31
230,900 00			230,900 00	6,226 00	No report.	No	report.	32
610,000 00			610,000 00	9,977 12	No report.	No	report.	33
		10,000 00	10,000 00	100 00				34
		30,000 00	30,000 00	751 89		7	7	35
150,000 00			150,000 00	3,690 98	No report.	No	report.	36
150,000 00			150,000 00	5,555 55	150,000 00	7	7	37
300,000 00			300,000 00	2,840 91	2,000 00	7	4	38
18,788,204 00			18,788,204 00	69,382 77	63,900 00	1,402	17	39
450,000 00			450,000 00	122,951 00		13	None.	40
2,000,000 00			2,000,000 00	13,668 67	40,000 00	7	4	41
491,200 00			491,200 00	8,882 27	325,250 00	42	26	42
2,000,000 00			2,000,000 00	6,777 36	1,806,600 00	38	21	43
325,400 00			325,400 00	8,237 97	325,400 00	202	124	44
Unknown.								45
300,000 00			300,000 00	20,435 96				46
200,000 00			200,000 00	2,289 39	1,200 00	8	7	47
1,547,862 50			1,547,862 50	27,701 13		14	None.	48
2,000,000 00	5,000,000 00		7,000,000 00	10,760 45		356	None.	49
5,155,000 00			5,155,000 00	17,041 32	None.	40		50
891,700 00			891,700 00	23,041 18	No report.	No	report.	51
14,000,000 00	7,000,000 00		21,000,000 00	26,672 76	None.	61	None.	52
		1,000 00	1,000 00	27 14	1,000 00	7	7	53
		491,420 00	491,420 00	24,571 00		9	3	54
1,000,000 00			1,000,000 00	10,000 00	3,000 00	8	3	55
123,300 00		255 88	123,555 88	1,966 02		131	126	56
255,300 00		9,504 01	264,804 01	7,459 27	25,200 00	84	66	57
70,000 00			70,000 00	19,444 44		28		58
5,300,000 00			5,300,000 00	21,370 96	10,300 00	127	9	59
1,600,000 00			1,600,000 00	16,666 67	1,000 00	12	10	60

Reported as the Toledo, Saginaw & Mackinaw.

## MICHIGAN RAILROAD RETURNS.

## 3.—CAPITAL STOCK.—CONTINUED.

Line No.	Railroads.	Amount Authorized.	Par Value of Shares.	Number of Shares Issued.
61	Toledo & South Haven.....	\$250,000 00	\$100 00	2,500
62	Traverse City.....	205,000 00	100 00	2,050
63	Wabash.....	52,000,000 00	100 00	520,000
64	Wisconsin Central.....	15,000,000 00	100 00	144,145
65	Detroit Union Railroad Depot & Station Company.....	1,850,000 00	100 00	185,000
	Total for commercial roads.....	\$288,054,576 67		3,701,755
	ORE AND FOREST ROADS.			
1	Bear Lake & Eastern.....	\$350,000 00	\$100 00	1,046
2	Crawford & Manistee River.....	50,000 00	100 00	500
3	Grass Lake & Manistee River.....	53,000 00	100 00	530
4	Hecla & Torch Lake.....	150,000 00	100 00	1,000
5	Hobart & Manistee River.....	60,000 00	100 00	600
6	Lake County.....	300,000 00	100 00	300
7	Manistee & Luther.....	400,000 00	100 00	1,000
8	North Branch & Sauble River.....	50,000 00	100 00	200
	Total for ore and forest roads.....	\$1,312,000 00		5,296
	Total for all roads.....	\$289,366,576 67		3,707,051

## 4.—INDEBTEDNESS.

Line No.	Railroads.	Funded.	Unfunded.	Total.
1	Battle Creek & Sturgis.....	\$500,000 00		\$500,000 00
2	Bay City & Battle Creek.....			
3	Chicago, Detroit & C. G. T. Junction.....	1,796,141 46		1,796,141 46
4	Chicago & Grand Trunk.....	12,000,000 00	\$984,374 39	12,984,374 39
5	Chicago, Kalamazoo & Saginaw.....			
6	Chicago & Northwestern.....	104,985,500 00	4,631,885 27	109,617,385 27
7	Chicago & West Michigan.....	4,246,000 00	1,194,009 28	5,440,009 28
8	Cincinnati, Jackson & Mackinaw.....	3,629,000 00	457,714 49	4,086,714 49
8½	Cin., Jackson & Mack.—W. H. Brown, Rec.....		116,171 40	116,171 40
9	Cincinnati, Saginaw & Mackinaw.....		836,886 23	836,886 23
10	Cincinnati, Wabash & Michigan.....	886,373 00	83,273 30	969,646 30
11	Detroit, Bay City & Alpena.....	2,500,000 00	43,919 98	2,543,919 98
12	Detroit, Grand Haven & Milwaukee.....	5,200,000 00	1,023,646 65	6,223,646 65
13	Detroit, Lansing & Northern.....	3,442,000 00	466,886 94	3,908,886 94
14	Grand Rapids, Lansing & Detroit.....	1,108,000 00	153,353 50	1,261,353 50
15	Saginaw & Western.....	566,000 00		566,000 00
16	Duluth, South Shore & Atlantic.....	8,366,335 00	3,656,992 11	12,023,327 11
17	Marquette, Houghton & Ontonagon.....	4,356,700 00		4,356,700 00
18	Marquette & Western.....			
19	Flint & Pere Marquette.....	9,119,000 00	741,882 57	9,860,882 57
20	Manistee.....			
21	Port Huron & Northwestern.....			
22	Saginaw & Clare County.....			
23	Saginaw & Mt. Pleasant.....			
24	Frankfort & Southeastern.....	222,000 00		222,000 00
25	Grand Rapids & Indiana.....	12,479,000 00	1,869,908 09	13,348,908 09
26	Hancock & Calumet.....	250,000 00	128,442 57	378,442 57

TABULAR STATEMENT.

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CAPITAL STOCK.—CONTINUED.

Amount Paid in.						Stockholders.		Line No.
On Common.	On Preferred.	On Shares not Issued.	Total.	Per Mile of Road.	Amount Held in Michigan.	Whole No.	No. in Mich.	
\$242,500 00			\$242,500 00	\$6,625 68	\$98,000 00	9	6	61
205,000 00			205,000 00	7,884 82	35,400 00	72	71	62
24,000,000 00	\$28,000,000 00		52,000,000 00	80,980 00	No report.	No	report.	63
11,787,100 00	2,627,404 00		14,414,504 00	Not report'd		11		64
1,650,000 00			1,650,000 00		1,640,000 00	16	15	65
\$259,188,884 81	\$94,544,947 84	\$1,681,276 69	\$355,414,808 84	\$20,708 10	\$8,859,800 00	14,382	961	
\$104,664 00			\$104,664 00	\$5,814 66		7	7	1
50,000 00			50,000 00	5,000 00	\$50,000 00	7	7	2
35,000 00		\$5,000 00	40,000 00	3,338 38	40,000 00	8	8	3
100,000 00			100,000 00	18,333 38	200 00	6	2	4
60,000 00			60,000 00	6,498 51	60,000 00	7	7	5
		60,000 00	60,000 00	5,454 84		7	6	6
100,000 00			100,000 00	1,562 50	100,000 00	6	6	7
20,000 00			20,000 00	2,000 00	20,000 00	7	7	8
\$469,664 00		\$65,000 00	\$534,664 00	\$3,656 07	\$270,200 00	55	50	
\$259,658,048 81	\$94,544,947 84	\$1,746,276 69	\$355,949,272 84	\$20,508 21	\$9,190,000 00	14,387	1,010	

INDEBTEDNESS—CONTINUED.

Miles of Road Owned.	Debt per Mile of Road Owned.	Indebtedness Previous Report.	Increase During 1889.	Decrease During 1889.	Total Interest on Indebtedness 1889.	Line No.
41.50	\$12,048 19		\$500,000 00			1
17.80						2
59.37	30,064 92	\$1,786,141 46			\$65,700 00	3
326.50	89,707 11	12,898,966 40	67,467 99		687,424 04	4
44.20						5
2,676.72	25,760 02	109,716,169 10		\$98,788 88	5,544,927 12	6
408.40	13,320 30	4,807,087 89	1,182,971 39		237,846 60	7
325.10	12,570 64	4,820,482 06		733,767 56	141,082 98	8
	357 34		116,171 40			8½
62.00	13,497 84		896,896 23			9
164.40	5,866 09	953,091 86	16,554 44		45,815 67	10
209.32	11,943 53	2,550,513 63		6,598 65	150,000 00	11
189.00	32,965 80	5,604,105 53	584,541 12		325,807 91	12
221.57	17,641 54	3,860,647 58	48,189 86		242,090 29	13
55.54	22,851 16	1,237,463 21	3,921 29			14
42.57	13,401 46	566,000 00				15
386.41	31,120 61	10,102,864 92	1,922,482 19		652,315 21	16
134.43		4,908,700 00		47,000 00		17
20.68						18
624.94	15,778 94	6,421,355 27	3,489,527 80		457,110 05	19
		2,742,405 06		2,742,405 06		20
						21
						22
						23
22.00	10,000 00		222,000 00			24
408.49	33,902 67	13,260,828 27	588,074 82		898,977 67	25
20.36	18,341 97	892,323 76		18,881 19	16,808 54	26

<sup>r</sup> Includes \$507,645.40 paid for six branch roads.

<sup>h</sup> Includes interest for proprietary roads.

<sup>i</sup> Operated by Manistee & Northeastern.

## MICHIGAN RAILROAD RETURNS.

## 4.—INDEBTEDNESS.—CONTINUED.

Line No.	Railroads.	Funded.	Unfunded.	Total.
27	Lake Shore & Michigan Southern	\$45,192,000 00		\$45,192,000 00
28	Detroit, Hillsdale & Southwestern			
29	Detroit, Monroe & Toledo	924,000 00		924,000 00
30	Fort Wayne & Jackson			
31	Kalamazoo, Allegan & Grand Rapids	840,000 00		840,000 00
32	Kalamazoo & White Pigeon	400,000 00		400,000 00
33	Northern Central Michigan	1,525,000 00		1,525,000 00
34	Lowell & Hastings		\$121,968 02	121,968 02
35	Manistee & Northeastern		567,068 33	567,068 33
36	Manistique		68,553 01	68,553 01
37	Mason & Oceana		64,611 19	64,611 19
38	Michigan Air Line Railway	1,508,666 67		1,508,666 67
39	Michigan Central	10,000,000 00	2,067,583 56	12,067,583 56
40	Canada Southern Bridge	1,000,000 00	1,118,368 89	2,118,368 89
41	Detroit & Bay City	a 8,576,000 00		8,576,000 00
42	Grand River Valley	c 1,500,000 00		1,500,000 00
43	Jackson, Lansing & Saginaw	2,419,000 00		2,419,000 00
44	Kalamazoo & South Haven	b 700,000 00		700,000 00
45	Michigan Air Line R. R.	d 2,100,000 00		2,100,000 00
46	Michigan Midland & Canada	328,635 00	391,401 53	715,036 53
47	Saginaw Bay & Northwestern			
48	Toledo, Canada Southern & Detroit	1,511,787 50	1,756,565 91	3,268,353 41
49	Milwaukee, Lake Shore & Western	11,296,000 00	222,208 33	11,518,208 33
50	Milwaukee & Northern	5,151,000 00	808,370 65	5,959,370 65
51	Mineral Range	612,100 00	29,221 21	641,321 21
52	Minneapolis, St. Paul & Sault Ste. Marie	21,000,000 00	1,122,223 23	22,122,223 23
53	Muskegon, Grand Rapids & Indiana	750,000 00	40,465 95	790,465 95
54	Ontonagon & Brule River			
55	Pontiac, Oxford & Northern		f 9,381 27	9,381 27
56	Saginaw, Tuscola & Huron	190,000 00	452,277 00	642,277 00
57	Saginaw Valley & St. Louis	446,000 00	118,602 18	564,602 18
58	Saginaw & Grand Rapids			
59	Toledo, Ann Arbor & North Michigan	5,040,000 00	688,865 74	5,728,865 74
60	Toledo, Saginaw & Muskegon	1,560,000 00	102,751 83	1,662,751 83
61	Toledo & South Haven	216,000 00	41,288 61	257,288 61
62	Traverse City	440,000 00	3,750 00	443,750 00
63	Wabash	e 78,000,000 00		78,000,000 00
64	Wisconsin Central	18,391,978 38	2,067,570 38	20,459,548 76
65	Detroit, Union R. R. Depot & Station Co.	600,000 00		600,000 00
	Total commercial roads	\$398,357,187 01	\$27,760,068 50	\$426,117,255 51
	ORE AND FOREST ROADS.			
1	Bear Lake & Eastern	\$6,000 00	\$19,544 14	\$25,544 14
2	Buckley & Douglas			
3	Crawford & Manistee River			
4	Grass Lake & Manistee River			
5	Hecla & Torch Lake		407,249 60	407,249 60
6	Hobart & Manistee River		45,584 39	45,584 39
7	Lake County		900 00	900 00
8	Manistee & Luther		99,294 56	99,294 56
9	North Branch & Sauble River		16,733 91	16,733 91
	Total ore and forest roads	\$6,000 00	\$580,306 60	\$586,306 60
	Total for all roads	\$398,363,187 01	\$28,340,375 10	\$426,703,562 11

a Issued by the Mich. Central. Secured by 1st mortgage on D. &amp; B. C. Road.

b \$390,000 issued by M. C. Road. Secured on Kal. &amp; S. H. R'd \$70,000 2d mortgage.

c Issued by Central. Secured on Grand River Valley Road.

d \$1,900,000 issued by Mich. Central. Secured on M. A. C. Division.

e On 1,678.50 miles of road. First report of reorganized corporation.

f Company reorganized during the year.



TABULAR STATEMENT.

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INDEBTEDNESS.—CONTINUED.

Miles of Road Owned.	Debt per Mile of Road Owned.	Indebtedness Previous Report.	Increase During 1889.	Decrease During 1889.	Total Interest on Indebtedness 1889.	Line No.
1,086.82		\$47,409,787 23		\$2,217,737 23	\$ 38,752,660 40	27
65.20						28
	\$14,882 22	924,000 00				29
97.83						30
58.42	14,878 00	840,000 00				31
	10,937 92	400,000 00				32
	24,942 75	1,525,000 00				33
12.00	10,989 00		\$121,868 02			34
39.90	14,212 61		567,068 33		31,827 53	35
40.75		88,276 23	80,276 79		2,215 89	36
34.00	2,396 00	58,828 82	5,782 87			37
105.60	14,286 61	1,546,500 92		\$7,834 25	75,433 34	38
270.07	46,905 00	11,886,883 14	980,900 42		1,080,000 00	39
3.66	578,789 00	2,043,018 79	75,350 10			40
146.32	24,439 00	3,576,000 00				41
88.79	17,900 00	1,500,000 00				42
295.10	8,197 22	2,479,000 00		60,000 00		43
89.50	17,215 00	710,000 00		10,000 00		44
115.16	18,285 00	2,100,000 00				45
14.68		689,115 24	25,921 29			46
89.31						47
55.87	58,498 86	3,271,120 41		2,817 00		48
650.52	17,706 69	10,845,262 18	672,946 15		671,499 39	49
308.25	18,040 89	4,552,410 64	904,960 01		287,967 88	50
17.00	37,724 77	670,671 75		29,350 54	184 72	51
787.32	28,098 18	22,083,399 00	88,824 28		962,124 86	52
36.85	21,450 90	802,417 66		11,961 71		53
46.10						54
100.20	93 81	1,984,814 80		1,945,433 53		55
66.67	9,648 14	604,215 86	88,061 14		34,327 87	56
85.50	15,904 29	555,120 17	9,482 01		35,690 00	57
3.60						58
248.00	22,898 65	5,466,917 52	211,948 22		302,751 84	59
96.00	17,320 38	1,613,430 62	49,321 21		78,000 00	60
36.60	7,028 30	286,637 48	20,601 13		13,241 96	61
26.00	17,067 31	443,750 00				62
335.30	46,470 00		78,000,000 00		2,188,398 32	63
226.96	Not reported.		20,459,848 76		781,866 00	64
3.34			600,000 00		24,000 00	65
12,884.04	\$34,142 00	\$316,788,363 44	\$112,341,462 71	\$7,962,555 55	\$19,625,060 18	
18.00	\$919 67	\$19,285 12		\$2,780 98	\$1,230 00	1
13.00		110,967 17		110,967 17		2
13.50						3
7.50	67,633 28		\$407,249 60			4
9.24	4,983 37	52,430 11		6,845 72		5
11.00	81 81	500 00	400 00			6
64.00	1,551 32	129,765 27		30,480 71	8,262 13	7
10.00	1,683 09		16,733 91			8
146.24	\$40,096 00	\$312,947 67	\$424,388 51	\$151,024 58	\$9,522 22	9
12,480.28	\$33,757 00	\$317,051,311 11	\$112,765,846 22	\$8,113,580 13	\$19,684,602 40	

## MICHIGAN RAILROAD RETURNS.

## 5.—COST OF PROPERTY COMPARED WITH STOCK AND DEBT.

Line No.	Railroads.	Total Reported Cost of Property.	Cost per Mile of Road.	Proportion of Cost for Michigan.
1	Battle Creek & Sturgis.....	\$1,000,000 00	\$34,096 38	\$1,000,000 00
2	Bay City & Battle Creek.....			
3	Chicago, Detroit & C. G. T. Junction.....	2,765,126 13	46,574 46	2,765,126 13
4	Chicago & Grand Trunk.....	18,408,303 65	56,365 10	12,625,781 37
5	Chicago, Kalamazoo & Saginaw.....			
6	Chicago & Northwestern.....	162,548,585 18	38,243 29	14,501,727 30
7	Chicago & West Michigan.....	10,403,607 22	25,472 10	9,525,088 52
8	Cincinnati, Jackson & Mackinaw.....	19,888,450 74	61,176 35	9,498,345 98
9	Cincinnati, Saginaw & Mackinaw.....	1,900,000 00	31,512 90	1,900,000 00
10	Cincinnati, Wabash & Michigan.....	8,429,226 69	20,857 70	696,647 18
11	Detroit, Bay City & Alpena.....	4,242,574 46	20,834 73	4,242,574 46
12	Detroit, Grand Haven & Milwaukee.....	6,721,958 51	35,565 92	6,721,958 51
13	Detroit, Lansing & Northern.....	7,534,310 92	33,959 06	7,534,310 92
14	Grand Rapids, Lansing & Detroit.....	1,269,363 50	22,855 30	1,269,363 50
15	Saginaw & Western.....	558,400 00	12,100 00	558,400 00
16	Duluth, South Shore & Atlantic.....	29,170,624 76	75,491 38	24,088,720 13
17	Marquette, Houghton & Ontonagon.....	8,624,347 15	55,547 77	8,624,347 15
18	Marquette & Western.....			
19	Flint & Pere Marquette.....	19,918,066 82	31,871 91	19,918,066 82
20	Manistee.....			
21	Port Huron & Northwestern.....			
22	Saginaw & Clare County.....			
23	Saginaw & Mt. Pleasant.....			
24	Frankfort & Southeastern.....	266,906 60	12,127 53	266,906 60
25	Grand Rapids & Indiana.....	16,966,267 29	41,588 07	14,778,052 54
26	Hancock & Calumet.....	757,490 50	37,204 83	757,490 50
27	Lake Shore & Michigan Southern.....	84,000,000 00	90,032 44	21,047,902 49
27½	Detroit & Chicago.....	5,176,557 58	76,576 29	4,818,712 07
28	Detroit, Hillsdale & Southwestern.....	1,288,648 59	19,764 55	1,288,648 59
29	Detroit, Monroe & Toledo.....	1,881,600 00	22,155 22	1,166,351 89
30	Fort Wayne & Jackson.....	2,719,579 53	27,799 08	1,238,166 79
31	Kalamazoo, Allegan & Grand Rapids.....	1,450,000 00	24,820 00	1,450,000 00
32	Kalamazoo & White Pigeon.....	610,000 00	16,680 00	610,000 00
33	Northern Central Michigan.....	1,357,000 00	22,195 00	1,357,000 00
34	Lowell & Hastings.....	180,444 79	10,989 09	180,444 79
35	Manistee & Northeastern.....	567,772 06	12,092 24	567,772 06
36	Manistique.....	261,081 95	6,406 92	261,081 95
37	Mason & Oceana.....	211,411 19	7,830 04	211,411 19
38	Michigan Air Line Railway.....	1,808,202 58	17,075 78	1,808,202 58
39	Michigan Central.....	30,936,350 89	114,549 38	25,815,412 98
40	Canada Southern Bridge.....	1,780,977 05	486,606 00	1,780,977 05
41	Detroit & Bay City.....	3,671,631 88		3,671,631 88
42	Grand River Valley.....	2,867,053 00	34,229 17	2,867,053 00
43	Jackson, Lansing & Saginaw.....	8,154,659 56	27,633 54	8,154,659 56
44	Kalamazoo & South Haven.....	395,400 00	10,010 13	395,400 00
45	Michigan Air Line Railroad.....			
46	Michigan Midland & Canada.....	586,342 02	39,941 56	586,342 02
47	Saginaw Bay & Northwestern.....	225,526 15	3,525 20	225,526 15
48	Toledo, Canada Southern & Detroit.....	3,115,069 99	55,755 68	2,635,571 14
49	Milwaukee, Lake Shore & Western.....	19,198,446 92	29,512 46	2,989,021 95
50	Milwaukee & Northern.....	10,737,527 61	85,495 95	2,129,757 00
51	Mineral Range.....	788,492 48	43,440 74	788,492 48
52	Minneapolis, St. Paul & Sault Ste. Marie.....	34,134,643 31	43,355 49	8,324,687 37
53	Muskegon, Grand Rapids & Indiana.....	724,138 52	19,650 98	724,138 52
54	Ontonagon & Brule River.....	523,562 66	26,178 13	523,562 66
55	Pontiac, Oxford & Northern.....	1,000,000 00	10,000 00	1,000,000 00
56	Saginaw, Tuscola & Huron.....	638,613 71	9,518 00	633,613 71
57	Saginaw Valley & St. Louis.....	705,213 81	19,898 35	705,213 81
58	Saginaw & Grand Rapids.....	70,000 00	19,444 44	70,000 00
59	Toledo, Ann Arbor & North Michigan.....	10,799,398 47	43,545 94	10,581,663 72
60	Toledo, Saginaw & Muskegon.....	3,160,000 00	32,916 67	3,160,000 00

a Included in report of Michigan Central Railroad in amount expended on leased lines.

b Not reported.

c Included with Marquette, Houghton & Ontonagon

d Capital accounts not yet stated.

**TABULAR STATEMENT.**

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**COST OF PROPERTY COMPARED WITH STOCK AND DEBT.—CONTINUED.**

Proportion of Cost for Michigan Previous Year.	Increased Cost, 1889.	Decreased Cost, 1889.	Total Stock and Debt.	Stock and Debt Per Mile of Road.	Excess of Stock and Debt over reported cost per Mile of Road.	Line No.
	\$1,000,000 00		\$1,000,000 00	\$24,086 38		1
						2
\$2,765,126 18			2,881,141 46	48,528 57	\$1,954 11	3
12,649,546 36		\$28,764 99	19,564,874 39	59,921 51	3,556 41	4
			3,875 00	79 44	79 44	5
14,468,826 50	122,901 80		184,432,706 80	43,392 05	5,148 76	6
						7
9,499,523 55	35,714 97		12,236,909 28	29,982 81	4,490 71	8
9,857,122 06		368,776 06	20,367,549 49	62,851 08	1,474 68	9
	1,900,000 00		1,908,788 53	30,868 68		10
676,915 80	19,731 38		3,013,705 06	18,331 54		11
4,209,546 07	33,028 89		4,213,919 98	19,921 74		12
6,709,479 90	12,478 61		7,728,646 65	40,892 81	5,326 89	13
						14
7,523,431 73	879 14		8,244,496 94	37,209 17	3,250 11	15
1,265,462 21	3,921 29		1,269,388 50	22,855 30		16
570,500 00		12,100 00	596,105 71	13,401 46	1,801 46	17
22,442,421 55	1,598,298 58		34,025,847 11	88,054 96	12,563 58	18
	8,634,347 15		10,513,826 07	67,717 55	12,169 78	19
						20
15,977,076 88	3,941,009 94		19,860,882 57	31,780 46		21
524,513 42		524,513 42				22
3,581,418 60		3,581,418 60				23
						24
	266,805 60		277,100 00	12,595 46	467 93	25
14,651,960 31	126,692 23		18,834,984 31	46,108 80	4,525 73	26
746,104 28	11,886 22		723,442 57	35,532 54		27
						28
21,047,902 49			96,266,000 00	45,051 41		29
4,818,712 07			1,000,000 00	14,762 90		30
1,268,648 59			1,850,000 00	20,705 52	940 97	31
1,196,361 88			1,368,100 00	21,472 69		32
1,238,168 79			2,727,554 80	37,890 83		33
1,450,000 00			1,450,000 00	34,820 00		34
610,000 00			690,900 00	17,251 84	371 84	35
1,837,000 00			2,135,000 00	24,942 75	2,747 75	36
						37
	180,444 79		181,868 02	10,969 00		38
	567,772 06		597,068 33	14,970 50	2,978 26	39
168,901 20	62,290 75		219,533 01	5,363 26		40
192,253 52	19,187 67		214,611 19	7,948 56	118 52	41
1,766,310 96	16,392 22		1,808,666 67	17,127 53	51 74	42
						43
25,311,892 45	3,520 53		39,011,787 56	144,450 65	29,901 27	44
1,750,977 05			2,568,388 89	701,740 00	215,134 00	45
3,635,121 37	86,510 01		2,000,000 00	13,668 67	13,668 67	46
2,967,053 00			1,991,200 00	34,229 17		47
8,147,491 47	7,168 09		4,419,000 00	14,974 58		48
1,035,400 00		640,000 00	395,400 00	10,010 13		49
						50
596,842 02			1,015,036 53	69,144 17	29,202 61	51
225,526 15			300,000 00	2,239 39		52
2,610,290 58	25,280 61		4,815,965 91	86,199 49	30,443 81	53
						54
3,129,696 93		140,676 98	18,518,308 33	28,467 64		55
2,085,939 12	69,817 88		10,612,370 85	35,082 81		56
723,340 97	15,151 51		1,083,021 21	60,785 95	17,325 21	57
6,471,369 25	1,853,918 12		49,122,223 23	54,770 89	11,415 40	58
713,233 55	10,899 97		791,465 85	21,478 04	1,827 06	59
513,058 92	10,508 74		491,420 00	24,371 00		60
3,026,422 10		2,026,422 10	1,009,381 27	10,093 81	93 81	
626,654 76	6,958 96		785,832 38	11,504 16	1,966 16	
706,213 81			829,408 19	23,363 55	3,470 20	
70,000 00			70,000 00	19,444 44		
10,790,853 20		199,191 48	10,978,865 74	44,289 61	723 67	
3,160,000 00			3,262,751 83	33,987 00	1,070 33	

<sup>c</sup> Reported as Chicago & Canada Southern.

<sup>f</sup> Absorbed by the Manistee & Northeastern.

<sup>g</sup> No cost for Michigan reported for previous years.

<sup>h</sup> For 1,026.96 miles.

## MICHIGAN RAILROAD RETURNS.

## 5.—COST OF PROPERTY COMPARED WITH STOCK AND DEBT.—CONTINUED.

Line No.	Railroads.	Total Reported Cost of Property.	Cost per Mile of Road.	Proportion of Cost for Michigan.
61	Toledo & South Haven.....	\$253,306 34	\$6,920 99	\$253,306 34
62	Traverse City.....	454,164 54	17,467 84	454,164 54
63	Wabash.....	129,970,000 00	77,450 00	6,126,235 00
64	Wisconsin Central.....	14,306,868 57	63,086 94	865,565 25
65	Detroit Union Railroad Depot & Station Co.....	2,250,000 00		2,250,000 00
	Total for commercial roads.....	\$688,726,456 87	\$55,020 61	\$264,440,561 14
	ORE AND FOREST ROADS.			
1	Bear Lake & Eastern.....	\$123,900 46	\$6,886 69	\$123,900 46
2	Buckley & Douglas.....	57,184 76	5,718 48	57,184 76
3	Crawford & Manistee River.....	40,000 00	3,333 33	40,000 00
4	Grass Lake & Manistee River.....	507,249 60	67,633 28	507,249 60
5	Hecla & Torch Lake.....	77,716 76	8,410 90	77,716 76
6	Hobart & Manistee River.....	70,900 00	6,445 54	70,900 00
7	Lake County.....	352,320 78	5,505 01	352,320 78
8	Manistee & Luther.....	50,857 33	5,086 73	50,857 33
9	North Branch & Sauble River.....			
	Total for ore and forest roads.....	\$1,280,189 69	\$8,754 08	\$1,280,189 69
	Total for all roads.....	\$809,006,646 56	\$55,207 63	\$265,720,770 83

## 6.—TRACK MILEAGE.

Line No.	Railroads.	Road Owned.		Road Operated.	
		Total Miles.	In Michigan Miles.	Total Miles.	In Michigan Miles.
1	Battle Creek & Sturgis.....	41.50	41.50	44.00	44.00
2	Bay City & Battle Creek.....	17.30	17.30		
3	Chicago, Detroit & C. G. T. Junction.....	59.37	59.37	59.37	59.37
4	Chicago & Grand Trunk.....	326.50	224.00	335.27	224.00
5	Chicago, Kalamazoo & Saginaw.....	44.20	44.20	35.66	35.66
6	Chicago & Northwestern.....	2,676.72	381.55	4,250.88	381.55
7	Chicago & West Michigan.....	408.40	373.94	408.40	373.94
8	Cincinnati, Jackson & Mackinaw.....	325.10	155.18	348.10	172.18
9	Cincinnati, Saginaw & Mackinaw.....	62.00	62.00		
10	Cincinnati, Wabash & Michigan.....	164.40	83.40	164.40	83.40
11	Detroit, Bay City & Alpena.....	209.32	209.32	209.32	209.32
12	Detroit, Grand Haven & Milwaukee.....	189.00	189.00	189.00	189.00
13	Detroit, Lansing & Northern.....	221.57	221.57	323.68	323.68
14	Grand Rapids, Lansing & Detroit.....	55.54	55.54		
15	Saginaw & Western.....	42.57	42.57		
16	Duluth, South Shore & Atlantic.....	386.41	318.43	577.77	469.55
17	Marquette, Houghton & Ontonagon.....	134.43	134.43		
18	Marquette & Western.....	20.83	20.83		
19	Flint & Pere Marquette.....	624.94	624.94	624.94	624.94
20	Manistee.....				
21	Port Huron & Northwestern.....				
22	Saginaw & Clare County.....				
23	Saginaw & Mt. Pleasant.....				
24	Frankfort & Southeastern.....	22.00	22.00	22.00	22.00
25	Grand Rapids & Indiana.....	408.49	355.88	556.94	418.22
26	Hancock & Calumet.....	20.36	20.36	20.36	20.36

# TABULAR STATEMENT.

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## COST OF PROPERTY COMPARED WITH STOCK AND DEBT.—CONTINUED.

Proportion of Cost for Michigan Previous Year.	Increased Cost, 1889.	Decreased Cost, 1889.	Total Stock and Debt.	Stock and Debt per Mile of Road.	Excess of Stock and Debt over reported cost per Mile of Road.	Line No.
\$249,670 86	\$3,637 43		\$499,788 61	\$13,653 98	\$6,782 99	61
454,164 54			648,750 00	24,951 93	7,484 09	62
	6,126,295 00		180,000,000 00	77,450 00		63
	865,565 25		Not reported.			64
1,979,899 85	270,110 15		2,258,000 00			65
\$244,182,464 69	\$27,819,960 06	\$7,511,863 63	\$742,868,255 72	\$60,281 14	\$5,210 53	
123,960 46			\$121,218 14	\$6,734 33		1
104,402 44		104,402 44				2
57,184 76			50,000 00	5,000 00		3
40,000 00			40,000 00	3,333 33		4
475,330 67	81,918 98		507,249 60	67,633 28		5
77,716 76			105,594 89	11,426 88	\$3,015 98	6
70,600 00	300 00		60,900 00	5,536 85		7
381,088 82	21,236 96		199,284 56	3,118 82		8
	50,857 83		36,738 91	3,673 09		9
\$1,280,278 91	\$104,313 22	\$104,402 44	\$1,120,970 60	\$7,665 28		
\$245,412,748 60	\$27,924,298 80	\$7,616,266 07	\$744,014,225 72	\$59,585 55	\$4,827 92	

## TRACK MILEAGE.—CONTINUED.

Track in Michigan.—Miles.										Line No.
Main.	Main Second.	Sidings and Spurs.	Estimated as a single track.	Gauge.		Main Track, 1888.	Increase, 1889.	Decrease, 1889.	Track in joint use, Miles.	
				Feet.	Inches.					
41.50		8.77	45.37	4	8 1/4		41.50			1
17.80		.85	18.15	4	8 1/4		17.80			2
59.37		25.85	85.22	4	8 1/4	59.37				3
224.00		48.90	272.90	4	8 1/4	224.00				4
44.20		3.50	47.70	4	8 1/4	30.58	13.63			5
381.55		87.47	469.02	4	8 1/4	312.76	68.79			6
378.94		112.11	486.05	4	8 1/4	378.94				7
155.18		14.76	169.94	4	8 1/4	155.18			17.00	8
62.00		14.00	76.00	4	8 1/4		62.00			9
83.40		7.60	41.00	4	8 1/4	33.40				10
209.32		23.66	232.98	4	8 1/4	204.43	4.89			11
189.00		62.59	251.59	4	8 1/4	189.00				12
221.57		92.83	314.40	4	8 1/4	221.57			4.00	13
55.54		d	55.54			55.54				14
42.57		9.12	51.69	4	8 1/4	42.57				15
318.43		47.09	365.32	4	8 1/4	305.20	13.23		1.78	16
134.43		40.26	174.69	4	8 1/4	121.48	2.95		1.50	17
20.68		8.85	29.68	4	8 1/4	22.65		1.82		18
624.94		269.59	894.53	b		353.05	27.36			19
						26.53				20
						218.00				21
										22
										23
22.00		2.00	24.00	4	8 1/4		22.00			24
355.38		95.64	451.02	4	8 1/4	356.09		.71		25
20.36		11.02	31.38	3		20.36				26

## MICHIGAN RAILROAD RETURNS.

## 6.—TRACK MILEAGE.—CONTINUED.

Line No.	Railroads.	Road Owned.		Road Operated.	
		Total Miles.	In Michigan Miles.	Total Miles.	In Michigan Miles.
27	Lake Shore & Michigan Southern System	1,088.82	402.82	1,409.55	570.78
28	Detroit, Hillsdale & Southwestern	65.20	65.20		
29	Detroit, Monroe & Toledo	a			
30	Fort Wayne & Jackson	97.83	44.54		
31	Kalamazoo, Allegan & Grand Rapids	58.42	58.42		
32	Kalamazoo & White Pigeon	a			
33	Northern Central Michigan				
34	Lowell & Hastings	12.00	12.00	12.00	12.00
35	Manistee & Northeastern	39.90	39.90	24.00	24.00
36	Manistee	40.75	40.75	40.75	40.75
37	Mason & Oceana	34.00	34.00	34.00	34.00
38	Michigan Air Line Railway	105.60	105.60	105.60	105.60
39	Michigan Central System	270.07	221.00	1,556.47	1,054.53
40	Canada Southern Bridge	3.66	3.66		
41	Detroit & Bay City	146.32	146.32		
42	Grand River Valley	83.79	83.79		
43	Jackson, Lansing & Saginaw	285.10	285.10		
44	Kalamazoo & South Haven	39.50	39.50		
45	Michigan Air Line Railroad	115.16	109.10		
46	Michigan Midland & Canada	14.68	14.68		
47	Saginaw Bay & Northwestern	89.31	89.31		
48	Toledo, Canada Southern & Detroit	55.87	47.27		
49	Milwaukee, Lake Shore & Western	650.52	101.28	691.75	101.28
50	Milwaukee & Northern	308.25	60.75	320.45	320.45
51	Mineral Range	17.00	17.00	17.00	17.00
52	Minneapolis, St. Paul & Sault Ste. Marie	787.32	192.01	799.85	192.01
53	Muskegon, Grand Rapids & Indiana	36.85	36.85		
54	Ontonagon & Brule River	46.10	46.10	46.10	46.10
55	Pontiac, Oxford & Northern	100.20	100.20	100.20	100.20
56	Saginaw, Tuscola & Huron	66.57	66.57	66.57	66.57
57	Saginaw Valley & St. Louis	35.50	35.50	45.10	45.10
58	Saginaw & Grand Rapids	3.60	3.60		
59	Toledo, Ann Arbor & North Michigan	248.00	243.00	323.20	315.20
60	Toledo, Saginaw & Muskegon	96.00	96.00	96.00	96.00
61	Toledo & South Haven	36.60	36.60	36.60	36.60
62	Traverse City	26.00	26.00		
63	Wabash	335.80	75.20	335.80	79.10
64	Wisconsin Central	226.98	13.74	246.29	13.74
65	Detroit Union Railroad Depot & Station Co.	c 3.84	3.84		
	Total for commercial roads,—miles.....	12,334.04	6,618.31	14,576.37	6,872.49
	ORE AND FOREST ROADS.				
1	Bear Lake & Eastern	18.00	18.00	18.00	18.00
2	Buckley & Douglas				
3	Crawford & Manistee River	13.00	13.00	13.00	13.00
4	Grass Lake & Manistee River	13.50	13.50	13.50	13.50
5	Hecla & Torch Lake	7.50	7.50	7.50	7.50
6	Hobart & Manistee River	9.24	9.24	9.24	9.24
7	Lake County	11.00	11.00	11.00	11.00
8	Manistee & Luther	64.00	64.00	64.00	64.00
9	North Branch & Sauble River	10.00	10.00	10.00	10.00
	Total for ore and forest roads,—miles.....	146.24	146.24	146.24	146.24
	Total for all roads,—miles.....	12,480.28	6,764.55	14,722.61	7,018.73

- a. Included with Lake Shore & Michigan Southern Railway Company report.
- c. Operated by Grand Rapids & Indiana Railroad Company.
- d. Included with Detroit, Lansing & Northern Railroad Company.
- e. Operated by Wabash Railroad Company.

# TABULAR STATEMENT.

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## TRACK MILEAGE.—CONTINUED.

Track in Michigan.—Miles.										Line No.
Main.	Main Second.	Sidings and Spurs.	Estimated as a single track.	Gauge.		Main Track, 1888.	Increase, 1889.	Decrease, 1889.	Track in joint use, Miles.	
				Feet.	Inches.					
402.62		94.24	496.86	4	8½	339.68	62.94			27
65.20		4.29	69.49	4	8½	65.20				28
44.54		5.29	49.83	4	8½	44.54				29
58.42		10.36	68.78	4	8½	58.42				30
										31
										32
										33
12.00			12.00	4	8½	12.00				34
39.90		4.50	44.40	4	8½	21.04	18.86			35
40.75		1.00	41.75	4	8½	24.00	16.75			36
34.00			34.00	3		27.00	7.00			37
105.60		7.44	113.04	4	8½	105.59	.01			38
221.00	120.00	163.40	508.40	4	8½	221.00				39
3.66		9.06	12.72	4	8½	3.66				40
146.82		42.22	189.54	4	8½	142.89	3.43			41
86.79		15.56	99.35	4	8½	86.79				42
295.10		190.11	485.21	4	8½	295.10				43
39.50		4.17	43.67	4	8½	39.50				44
109.10		15.70	124.80	4	8½	109.10				45
14.68		.81	15.49	4	8½	14.68				46
89.31		2.59	91.90	4	8½	87.21	2.10			47
47.27		28.09	75.36	4	8½	47.27				48
101.28		25.71	126.99	4	8½	101.24	.04			49
60.75		18.19	78.94	4	8½	58.00	2.75			50
17.00		5.00	22.00	4	8½	17.00				51
192.01		21.83	213.84	4	8½	192.01				52
36.85		6.46	43.31	4	8½	36.85				53
46.10		1.50	47.60	4	8½	20.00	26.10			54
100.20		6.80	107.00	4	8½	100.20				55
66.57		9.29	75.86	4	8½	66.57				56
35.50		5.64	41.14	4	8½	35.50			6.00	57
3.60			3.60	4	8½	3.60				58
243.00		33.00	276.00	4	8½	240.00	3.00			59
96.00		8.09	104.09	4	8½	96.00				60
36.60		1.20	37.80	3		36.60				61
26.00		2.68	28.68	4	8½	26.00				62
75.20		30.79	105.99	4	8½	75.20			3.90	63
13.74		5.07	18.81	4	8½		13.74			64
3.34		3.50	6.84	4	8½	3.34				65
6,613.31	120.00	1,765.44	8,498.75			6,185.48	430.96	2.53	34.18	
18.00			18.00	3		18.00				1
13.00			13.00	3		10.00	3.00			2
13.50			13.50	3		12.00	1.50			3
7.50			7.50	3		7.50				4
9.24		10.00	19.24	3		9.24				5
11.00			11.00	3		11.00				6
64.00			64.00	3		47.50	16.50			7
10.00			10.00	3			10.00			8
146.24		10.00	156.24			115.24	31.00			9
6,759.55	120.00	1,775.44	8,654.99			6,300.72	461.96	2.38		

## MICHIGAN RAILROAD RETURNS.

## 7.—TRAFFIC EARNINGS.

Line No.	Railroads.	Passenger Department.	
		Passenger Fares.	Express and Baggage.
1	Battle Creek & Sturgis.....	\$7,281 28	\$2,127 73
2	Bay City & Battle Creek.....		
3	Chicago, Detroit & C. G. T. Junction.....	129,075 63	10,211 04
4	Chicago & Grand Trunk.....	1,014,408 06	57,198 24
5	Chicago, Kalamazoo & Saginaw.....	16,461 76	571 22
6	Chicago & Northwestern.....	6,384,207 51	382,734 43
7	Chicago & West Michigan.....	495,493 34	19,505 94
8	Cincinnati, Jackson & Mackinaw.....	140,084 24	29,506 06
9	Cincinnati, Jackson & Mackinaw, W. H. Brown, Receiver.....	28,001 32	5,090 86
10	Cincinnati, Wabash & Michigan.....	206,472 10	11,173 61
11	Detroit, Bay City & Alpena.....	88,725 80	1,906 49
12	Detroit, Grand Haven & Milwaukee.....	433,518 41	25,724 06
13	Detroit, Lansing & Northern.....	461,652 15	17,153 92
14	Grand Rapids, Lansing & Detroit.....		
15	Saginaw & Western.....		
16	Duluth, South Shore & Atlantic.....	456,788 57	14,506 00
17	Marquette, Houghton & Ontonagon.....		
18	Marquette & Western.....		
19	Flint & Pere Marquette.....	775,818 69	37,613 57
20	Manistee.....		
21	Port Huron & Northwestern.....		
22	Saginaw & Clare County.....		
23	Saginaw & Mt. Pleasant.....		
24	Frankfort & Southeastern.....		
25	Grand Rapids & Indiana.....	794,452 21	31,147 23
26	Hancock & Calumet.....	16,966 99	212 34
27	Lake Shore & Michigan Southern System.....	5,062,490 41	485,933 39
28	Detroit, Hillsdale & Southwestern.....		
29	Detroit, Monroe & Toledo.....		
30	Fort Wayne & Jackson.....		
31	Kalamazoo, Allegan & Grand Rapids.....		
32	Kalamazoo & White Pigeon.....		
33	Northern Central Michigan.....		
34	Lowell & Hastings.....	1,214 05	
35	Manistee & Northeastern.....	18,074 55	86 00
36	Manistique.....	482 16	
37	Mason & Oceana.....	5,007 70	
38	Michigan Air Line Railway.....	32,062 68	2,961 15
39	Michigan Central System.....	4,327,091 37	368,334 08
40	Canada Southern Bridge.....		
41	Detroit & Bay City.....		
42	Grand River Valley.....		
43	Jackson, Lansing & Saginaw.....		
44	Kalamazoo & South Haven.....		
45	Michigan Air Line Railroad.....		
46	Michigan Midland & Canada.....		
47	Saginaw Bay & Northwestern.....		
48	Toledo, Canada Southern & Detroit.....		
49	Milwaukee, Lake Shore & Western.....	578,719 83	50,562 08
50	Milwaukee & Northern.....	309,364 74	21,007 32
51	Mineral Range.....	33,486 74	1,198 63
52	Minneapolis, St. Paul & Sault Ste. Marie.....	307,565 74	8,759 94
53	Muskegon, Grand Rapids & Indiana.....		
54	Ontonagon & Brule River.....	1,691 67	15 50
55	Pontiac, Oxford & Northern.....	37,515 06	2,490 48
56	Saginaw, Tuscola & Huron.....	89,069 55	418 18
57	Saginaw Valley & St. Louis.....	48,345 79	609 05
58	Saginaw & Grand Rapids.....		
59	Toledo, Ann Arbor & North Michigan.....	226,534 01	17,042 26
60	Toledo, Saginaw & Muskegon.....	28,652 78	725 80

<sup>a</sup> Includes Ackerman, Receiver.

<sup>b</sup> Detroit Division only.



# TABULAR STATEMENT.

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## TRAFFIC EARNINGS.—CONTINUED.

Passenger Department.			Freight Department.			Total Traffic Earnings.	Line No.
Mails.	Other Sources.	Total.	Freights.	Other Sources.	Total.		
\$1,577 98	\$19 24	\$11,006 18	\$8,144 98		\$8,144 98	\$19,151 16	1
9,374 68		148,661 35	100,606 26		100,606 26	249,267 61	2
41,086 09		1,112,687 39	2,618,483 43		2,618,483 43	3,731,170 82	3
1,448 97	206 94	18,686 89	15,434 80		15,434 80	34,123 69	4
581,455 52		7,348,397 46	18,596,690 49		18,596,690 49	25,945,087 95	5
39,994 15	1,200 00	556,183 43	818,565 16	\$134 71	818,699 87	1,374,883 30	7
18,797 72		188,338 04	837,392 64		837,392 64	525,730 68	8
3,144 00		81,236 20	63,675 57		63,675 57	94,911 77	9
12,421 82		280,067 08	296,222 33	7,773 23	303,995 56	584,062 59	10
11,168 13	6,574 15	108,376 57	376,729 19		376,729 19	485,105 76	11
26,352 49		488,595 56	580,227 49		580,227 49	1,068,823 05	12
37,721 07		516,527 14	601,880 96	3,005 76	604,886 72	1,121,413 86	13
28,125 48	890 11	500,400 16	1,423,674 95	8,951 88	1,432,626 83	1,933,026 99	14
48,610 63	20,994 66	888,087 55	1,449,242 05		1,449,242 05	2,332,279 60	15
							16
							17
							18
							19
							20
							21
							22
							23
47,473 89	22,858 70	895,982 02	1,535,597 70	40,690 70	1,576,288 40	2,472,280 42	24
817 65		17,996 98	116,166 81		116,166 81	134,163 79	25
1,122,340 68		6,690,754 48	12,336,744 52	209,065 21	12,545,809 73	19,236,584 21	26
							27
							28
							29
							30
							31
							32
							33
							34
164 70		18,325 25	23,294 84		23,294 84	46,620 09	35
		452 16	44,208 83		44,208 83	44,655 99	36
940 26		5,947 96	33,651 84		33,651 84	39,599 80	37
7,262 52		42,326 55	110,313 90		110,313 90	152,640 45	38
249,616 07		4,945,241 52	8,786,962 70		8,786,962 70	13,682,204 22	39
							40
							41
							42
							43
							44
							45
							46
							47
							48
51,754 94		681,036 85	2,793,295 94	334 50	2,793,630 44	3,474,667 29	49
23,956 15	949 60	335,277 81	871,326 50		871,326 50	1,226,604 31	50
987 42		35,672 79	69,711 66		69,711 66	105,384 45	51
33,563 33	28,618 83	378,502 89	1,221,768 99	23,022 51	1,244,791 50	1,623,284 39	52
45 40		1,752 57	3,977 86		3,977 86	5,730 43	53
5,780 12		45,775 66	56,224 61		56,224 61	102,000 27	54
2,891 49		42,379 22	64,190 83		64,190 83	106,570 05	55
3,300 84		52,256 68	43,691 33	9 00	43,700 33	95,956 01	56
24,051 42		267,627 69	636,285 61	29,106 48	665,402 09	933,029 78	57
4,497 00		33,275 58	58,594 66		58,594 66	91,970 24	58

c Included with Grand Rapids & Indiana.  
d Absorbed by the Manistee & Northern.

## MICHIGAN RAILROAD RETURNS.

## 7.—TRAFFIC EARNINGS.—CONTINUED.

Line No.	Railroads.	Passenger Department.	
		Passenger Fares.	Express and Baggage.
61	Toledo & South Haven.....	\$12,267 18	\$1,064 05
62	Traverse City.....		
63	Wabash.....	c 433,815 16	9,673 37
64	Wisconsin Central.....	b 515,249 76	43,063 32
65	Detroit Union Railroad Depot & Station Company.....		
	Total for commercial roads.....	\$23,482,884 19	\$1,060,429 98
	ORE AND FOREST ROADS.		
1	Bear Lake & Eastern.....	d 85 36	
2	Buckley & Douglas.....		
3	Crawford & Manistee River.....		
4	Grass Lake & Manistee River.....		
5	Hecle & Torch Lake.....		
6	Hobart & Manistee River.....		
7	Lake County.....		
8	Manistee & Luther.....	400 69	
9	North Branch & Sauble River.....		
	Total for ore and forest roads.....	\$496 05	
	Total for all roads.....	\$23,482,870 24	\$1,060,429 98

## 8.—GROSS INCOME.

Line No.	Railroads.	Traffic Earnings, (Table 7.)	Operating Receipts Other than for Traffic Earnings.	Total Receipts from Operation.
1	Battle Creek & Sturgis.....	\$19,151 16		\$19,151 16
2	Bay City & Battle Creek.....			
3	Chicago, Detroit & C. G. T. Junction.....	249,267 61	\$761 50	250,029 11
4	Chicago & Grand Trunk.....	3,731,170 82	1,604 60	3,732,775 42
5	Chicago, Kalamazoo & Saginaw.....	34,128 69		34,128 69
6	Chicago & Northwestern.....	25,945,067 95	240,192 87	26,185,260 82
7	Chicago & West Michigan.....	1,374,883 30	1,200 00	1,376,083 30
8	Cincinnati, Jackson & Mackinaw.....	525,730 68	2,732 78	528,463 46
9	Cin. Jack. & Mack., W. H. Brown, Receiver.....	94,911 77	60 21	94,974 98
10	Cincinnati, Wabash & Michigan.....	534,062 59		534,062 59
11	Detroit, Bay City & Alpena.....	485,105 76	2,108 67	487,209 43
12	Detroit, Grand Haven & Milwaukee.....	1,065,823 05	10,789 66	1,076,612 71
13	Detroit, Lansing & Northern.....	1,121,413 86	10,572 05	1,131,985 91
14	Grand Rapids, Lansing & Detroit.....			
15	Saginaw & Western.....			
16	Duluth, South Shore & Atlantic.....	1,983,026 99	43,323 39	1,976,350 38
17	Marquette, Houghton & Ontonagon.....			
18	Marquette & Western.....			
19	Flint & Pere Marquette.....	2,332,279 80		2,332,279 80
20	Manistee.....			
21	Port Huron & Northwestern.....			
22	Saginaw & Clare County.....			
23	Saginaw & Mt. Pleasant.....			
24	Frankfort & Southeastern.....			
25	Grand Rapids & Indiana.....	2,472,220 42	28,512 48	2,495,732 90
26	Hancock & Calumet.....	134,163 79	498 65	134,657 44

# TABULAR STATEMENT.

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## TRAFFIC EARNINGS.—CONTINUED.

Passenger Department.			Freight Department.			Total Traffic Earnings.	Line No.
Mails.	Other Sources.	Total.	Freights.	Other Sources.	Total.		
\$1,254 20		\$14,585 43	\$9,597 55		\$9,597 55	\$24,182 98	61
18,141 94	\$7,466 31	469,066 78	1,338,887 09		1,338,887 09	1,807,983 87	62
31,459 76	29,238 89	619,011 23	1,876,759 92	\$10,600 29	1,887,360 21	2,006,371 44	63
							64
							65
\$2,491,798 00	\$119,011 93	\$27,753,624 10	\$58,795,601 08	\$332,694 27	\$59,128,295 35	\$86,881,919 45	
		\$85 36	\$10,623 25		\$10,623 25	\$10,708 61	1
			14,735 86		14,735 86	14,735 86	2
			12,787 32		12,787 32	12,787 32	3
			97,454 56		97,454 56	97,454 56	4
							5
			32,281 73		32,281 73	32,281 73	6
			20,061 08		20,061 08	20,061 08	7
		400 69	136,987 54		136,987 54	137,388 23	8
			12,389 44		12,389 44	12,389 44	9
		\$486 05	\$337,320 78		\$337,320 78	\$337,806 83	
\$2,491,798 00	\$119,011 93	\$27,754,110 15	\$59,132,921 86	\$332,694 27	\$59,465,616 13	\$87,219,726 28	

## GROSS INCOME.—CONTINUED.

Income from Sources Other than Operating.	Total Income, 1889.	Proportion for Michigan.	Proportion for Michigan, 1888.	Increase of Income, 1889.	Decrease of Income, 1889.	Line No.
	\$19,151 16	\$19,151 16		\$19,151 16		1
	250,029 11	250,029 11	\$248,834 89	1,194 22		2
	8,732,775 42	2,489,985 33	2,156,911 59	337,023 73		3
	84,123 69	34,123 69		34,123 69		4
	26,185,280 82	2,350,611 92	2,306,882 92	144,729 00		5
						6
\$6,945 61	1,362,978 91	1,265,187 09	1,301,538 26		\$36,351 17	7
169 78	528,633 24	261,480 42	272,645 08		11,184 66	8
	94,971 98	46,989 44		46,989 44		9
	584,062 59	108,501 57	99,477 47	9,024 10		10
	487,209 43	487,209 43	458,298 38	28,921 05		11
	1,076,612 71	1,076,612 71	1,111,768 70		35,156 99	12
						13
	1,181,985 91	1,181,985 91	1,041,799 87	90,186 04		14
						15
2,888 00	1,979,188 38	1,749,686 26	1,414,509 69	335,176 57		16
						17
						18
95,299 01	2,427,578 61	2,427,578 61	2,235,979 52	191,599 09		19
			330,298 26		\$30,298 26	20
						21
						22
						23
	2,495,732 90	2,197,881 28	2,146,078 02	51,803 26		24
	134,637 44	134,637 44	116,490 23	18,147 19		25
						26

## MICHIGAN RAILROAD RETURNS.

## 8.—GROSS INCOME.—CONTINUED.

Line No.	Railroads.	Traffic Earnings, (Table 7.)	Operating Receipts Other than for Traffic Earnings.	Total Receipts from Operation.
27	Lake Shore & Michigan Southern System.....	\$19,236,564 21	\$250,632 53	\$19,487,196 74
28	Detroit, Hillsdale & Southwestern.....			
29	Detroit, Monroe & Toledo.....			
30	Fort Wayne & Jackson.....			
31	Kalamazoo, Allegan & Grand Rapids.....			
32	Kalamazoo & White Pigeon.....			
33	Northern Central Michigan.....			
34	Lowell & Hastings.....	8,586 14	91 53	8,677 67
35	Manistee & Northeastern.....	46,620 09	44 43	46,664 52
36	Manistique.....	44,685 99		44,685 99
37	Mason & Oceana.....	39,599 80		39,599 80
38	Michigan Air Line railway.....	152,640 45		152,640 45
39	Michigan Central System.....	13,682,204 22	104,720 94	13,786,925 16
40	Canada Southern Bridge.....			
41	Detroit & Bay City.....			
42	Grand River Valley.....			
43	Jackson, Lansing & Saginaw.....			
44	Kalamazoo & South Haven.....			
45	Michigan Air Line railroad.....			
46	Michigan Midland & Canada.....			
47	Saginaw Bay & Northwestern.....			
48	Toledo, Canada Southern & Detroit.....			
49	Milwaukee, Lake Shore & Western.....	3,474,667 29		3,474,667 29
50	Milwaukee & Northern.....	1,226,604 31	4,427 02	1,231,031 33
51	Mineral Range.....	106,384 45	4,390 61	109,775 06
52	Minneapolis, St. Paul & Sault Ste. Marie.....	1,623,294 39	28,117 72	1,651,412 11
53	Muskegon, Grand Rapids & Indiana.....	b		
54	Ontonagon & Brule River.....	5,780 43		5,780 43
55	Pontiac, Oxford & Northern.....	102,000 27	68 00	102,068 27
56	Saginaw, Tuscola & Huron.....	106,570 05	414 17	106,984 22
57	Saginaw Valley & St. Louis.....	95,966 01	957 69	96,923 70
58	Saginaw & Grand Rapids.....			
59	Toledo, Ann Arbor & North Michigan.....	953,029 78	61,277 20	1,014,306 98
60	Toledo, Saginaw & Muskegon.....	91,870 24		91,870 24
61	Toledo & South Haven.....	24,182 98		24,182 98
62	Traverse City.....	b		
63	Wabash.....	a 1,807,983 87		1,807,983 87
64	Wisconsin Central.....	2,006,371 44	6,723 69	2,013,095 13
65	Detroit Union Railroad Depot & Station Co.....		127,752 71	127,752 71
	Total for commercial roads.....	\$66,881,919 45	\$926,963 10	\$67,808,787 55
	ORE AND FOREST ROADS.			
1	Boar Lake & Eastern.....	10,708 61		10,708 61
2	Buckley & Douglas.....	c		
3	Crawford & Manistee River.....	14,735 66		14,735 66
4	Grass Lake & Manistee River.....	12,787 32		12,787 32
5	Hecla & Torch Lake.....	97,454 56		97,454 56
6	Hobart & Manistee River.....	32,291 73		32,291 73
7	Lake County.....	20,061 08		20,061 08
8	Manistee & Luther.....	137,338 23		137,338 23
9	North Branch & Sauble River.....	12,339 44		12,339 44
	Total for ore and forest roads.....	\$337,906 83		\$337,906 83
	Total for all roads.....	\$67,219,726 28	\$926,963 10	\$68,146,594 38

a Includes business of the Detroit Division only.

b Included with Grand Rapids &amp; Indiana Railroad.

c Absorbed by the Manistee &amp; Northeastern.

TABULAR STATEMENT.

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GROSS INCOME.—CONTINUED.

Increase from Sources Other than Operating.	Total Income, 1889.	Proportion for Michigan.	Proportion for Michigan, 1888.	Increase of Income, 1889.	Decrease of Income, 1889.	Line No.
\$382,541 49	\$19,869,738 23	\$4,693,222 16	\$4,300,547 36	\$392,674 80		27
						28
						29
						30
						31
						32
						33
						34
	3,677 67	3,677 67		3,677 67		35
	46,664 52	46,664 52		46,664 52		36
	44,685 99	44,685 99	31,597 29	18,088 70		37
	39,599 90	39,599 90	37,446 27	2,153 53		38
	152,640 45	152,640 45	153,599 93		\$12,959 48	39
38,964 91	13,825,960 07	9,310,061 46	7,558,239 86	1,751,821 60		40
						41
						42
						43
						44
						45
						46
						47
						48
15,298 98	3,489,961 22	546,001 58	478,327 00	67,674 58		49
	1,231,081 33	234,728 29	199,466 64	35,261 65		50
	109,775 06	109,775 06	99,563 58	10,211 48		51
	1,651,412 11	387,748 85	277,445 67	110,303 18		52
						53
	5,730 43	5,730 43	4,844 14	886 29		54
	102,068 27	102,068 27	103,967 57		1,799 30	55
	106,984 22	106,984 22	92,415 93	14,568 29		56
456 00	97,289 70	97,289 70	103,984 10		6,664 40	57
						58
	1,014,306 98	998,648 44	687,579 01	306,669 43		59
	91,870 24	91,870 24	53,097 85	38,772 39		60
	24,182 98	24,182 98	24,465 64		282 66	61
						62
	1,807,983 67	426,518 12	351,494 33	75,023 79		63
497,409 23	2,510,504 86	80,548 02		80,548 02		64
	127,752 71	127,752 71	128,663 88		911 17	65
\$1,089,887 96	\$88,848,672 51	\$33,663,960 32	\$29,889,098 95	\$4,260,518 46	\$435,632 09	
	10,708 61	10,708 61	9,040 80	1,668 01		1
			13,675 33		13,675 33	2
	14,735 86	14,735 86	12,100 85	2,635 01		3
	12,787 32	12,787 32	17,924 09		5,136 77	4
	97,454 56	97,454 56	94,165 11	3,289 45		5
	32,281 73	32,281 73	37,062 63		4,780 90	6
	20,061 08	20,061 08	19,693 22	367 86		7
	137,888 23	137,888 23	118,748 53	19,139 70		8
	12,389 44	12,389 44		12,389 44		9
	\$337,906 88	\$337,906 88	\$322,410 36	\$38,989 47	\$23,598 00	
\$1,089,887 96	\$89,186,479 34	\$34,001,787 15	\$30,161,504 31	\$4,299,507 93	\$459,223 09	

## 9.—EXPENSES.

Line No.	Railroads.	Maintenance of Way and Buildings.	Maintenance of Motive Power and Cars.	Conducting Transportation.
1	Battle Creek & Sturgis.....	\$2,808 66	\$489 56	\$3,298 91
2	Bay City & Battle Creek.....			
3	Chicago, Detroit & C. G. T. Junction.....	50,148 78	68,990 98	108,577 34
4	Chicago & Grand Trunk.....	359,487 58	405,228 00	1,610,205 83
5	Chicago, Kalamazoo & Saginaw.....		2,068 53	11,696 06
6	Chicago & Northwestern.....	3,440,338 57	2,237,277 63	8,558,799 68
7	Chicago & West Michigan.....	271,772 96	300,835 02	496,771 15
8	Cincinnati, Jackson & Mackinaw.....	97,968 28	61,490 11	205,266 61
9	Cin., Jack. & Mack., W. H. Brown, Receiver.....	16,890 75	10,585 53	35,974 73
10	Cincinnati, Wabash & Michigan.....	106,148 57	49,308 33	156,675 90
11	Detroit, Bay City & Alpena.....	51,798 87	15,296 29	198,358 68
12	Detroit, Grand Haven & Milwaukee.....	164,367 13	111,788 47	434,485 04
13	Detroit, Lansing & Northern.....	175,222 73	187,894 57	370,066 84
14	Grand Rapids, Lansing & Detroit.....			
15	Saginaw & Western.....			
16	Duluth, South Shore & Atlantic.....	207,892 28	144,774 49	687,516 95
17	Marquette, Houghton & Ontonagon.....			
18	Marquette & Western.....			
19	Flint & Pere Marquette.....	267,511 41	198,902 75	876,967 67
20	Manistee.....			
21	Port Huron & Northwestern.....			
22	Saginaw & Clare County.....			
23	Saginaw & Mt. Pleasant.....			
24	Frankfort & Southeastern.....			
25	Grand Rapids & Indiana.....	440,506 15	292,654 25	737,389 39
26	Hancock & Calumet.....	13,396 04	12,138 98	41,334 25
27	Lake Shore & Michigan Southern.....	2,775,565 70	2,473,961 35	6,199,425 22
28	Detroit, Hilldale & Southwestern.....			
29	Detroit, Monroe & Toledo.....			
30	Fort Wayne & Jackson.....			
31	Kalamazoo, Allegan & Grand Rapids.....			
32	Kalamazoo & White Pigeon.....			
33	Northern Central Michigan.....			
34	Lowell & Hastings.....		126 24	4,973 66
35	Manistee & Northeastern.....	9,687 13	3,699 32	24,458 07
36	Manistique.....	278 02	2,928 50	19,815 84
37	Mason & Oceana.....	8,313 88	10,014 07	20,141 22
38	Michigan Air Line Railway.....	52,617 92	10,314 96	62,905 17
39	Michigan Central.....	1,916,132 35	1,900,612 35	4,652,262 95
40	Canada Southern Bridge.....			
41	Detroit & Bay City.....			
42	Grand River Valley.....			
43	Jackson, Lansing & Saginaw.....			
44	Kalamazoo & South Haven.....			
45	Michigan Air Line Railroad.....			
46	Michigan Midland & Canada.....			
47	Saginaw Bay & Northwestern.....			
48	Toledo, Canada Southern & Detroit.....			
49	Milwaukee, Lake Shore & Western.....	491,515 27	215,972 44	943,835 04
50	Milwaukee & Northern.....	189,710 05	126,548 04	373,516 74
51	Mineral Range.....	10,264 49	6,639 51	26,965 35
52	Minneapolis, St. Paul & Sault Ste. Marie.....	146,458 89	129,624 95	568,780 21
53	Muskegon, Grand Rapids & Indiana.....			
54	Ontonagon & Brule River.....	8,363 60	2,898 27	4,525 04
55	Pontiac, Oxford & Northern.....	87,956 05	10,029 51	30,667 33
56	Saginaw, Tuscola & Huron.....	25,002 29	8,110 77	87,335 33
57	Saginaw Valley & St. Louis.....	12,250 07	6,989 43	28,559 02
58	Saginaw & Grand Rapids.....			
59	Toledo, Ann Arbor & North Michigan.....	188,928 96	100,335 45	553,319 94
60	Toledo, Saginaw & Muskegon.....	27,860 43	10,002 06	47,012 35

\* Included with the Grand Rapids & Indiana Railroad Company.

# TABULAR STATEMENT.

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## EXPENSES.—CONTINUED.

General Expenses, Including Taxes.	Total Expense and Taxes.	Proportion of Expenses and Taxes for Michigan.	Same for Michigan Previous Year.	Increase, 1889.	Decrease, 1889.	Line No.
\$1,083 10	\$8,208 23	\$8,208 23		\$8,208 23		1
14,594 70	287,806 70	287,806 70	\$288,991 83	3,314 87		2
429,749 38	2,804,668 79	1,848,540 57	1,586,618 02	259,922 55		3
3,366 40	17,448 99	17,448 99	12,914 34	4,584 65		4
2,071,294 49	16,907,710 87	1,468,917 79	1,464,657 18		\$789 89	5
109,086 66	1,018,465 79	982,529 62	958,565 86		26,086 24	6
98,279 56	458,004 56	226,589 04	226,266 27	362 77		7
14,378 78	78,024 79	88,591 07		88,591 07		8
65,495 98	377,613 73	76,717 13	75,809 96	1,407 14		9
35,850 53	290,791 87	290,791 87	287,856 16		7,084 79	10
111,847 17	822,962 61	822,962 61	837,615 70		14,632 89	11
124,289 88	806,924 02	806,924 02	720,680 50	86,289 52		12
171,381 56	1,161,515 28	1,089,160 57	912,353 95	126,806 62		13
206,762 50	1,552,164 33	1,552,164 33	1,468,682 62	83,481 71		14
			224,858 13		224,858 13	15
199,854 98	1,670,858 62	1,326,273 88	1,479,870 25		158,596 42	16
11,174 76	78,044 08	78,044 08	78,043 21	4,965 83		17
1,898,479 80	12,847,451 57	3,145,615 90	2,606,461 50	540,154 40		18
6,224 31	5,099 90	5,099 90		5,099 90		19
1,875 46	44,103 88	44,103 88	23,186 40	44,108 53		20
748 98	24,897 82	24,897 82	36,455 59	1,211 42		21
4,736 31	39,218 10	39,218 10	127,997 95	2,762 51		22
1,526,150 67	180,574 35	180,574 35		2,576 40		23
	9,895,158 82	6,016,726 61	5,898,642 63	123,088 96		24
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312,881 22	1,954,208 97	279,543 34	267,694 02	11,849 32		49
149,077 18	898,882 01	180,087 37	189,146 06	20,891 31		50
15,060 88	61,930 23	61,930 23	59,506 72	2,333 51		51
198,203 70	1,083,066 75	279,406 73	125,884 85	158,572 37		52
810 58	11,092 44	11,092 44	5,329 41	5,763 08		53
18,178 55	91,881 66	91,831 66	90,271 86	1,559 80		54
8,581 02	77,029 41	77,029 41	79,537 55		2,508 14	55
9,210 10	57,958 62	57,958 62	79,991 97		22,033 35	56
78,048 44	668,130 69	656,323 75	424,715 92	231,606 83		57
5,019 07	89,893 96	89,893 96	83,811 50	56,082 46		58
						59
						60

b Absorbed by the Manistee & Northeastern.

## 9.—EXPENSES.—CONTINUED.

Line No.	Railroads.	Maintenance of Way and Buildings.	Maintenance of Motive Power and Cars.	Conducting Transportation.
61	Toledo & South Haven.....	\$2,989 23	\$546 84	\$8,605 90
62	Traverse City.....	a 1,539,819 07	1,235,681 96	3,403,436 85
63	Wabash.....	227,343 00	193,001 96	696,410 92
64	Wisconsin Central.....			
65	Detroit Union Railroad Depot & Station Co.....			
	Total for commercial roads.....	\$13,270,754 01	\$10,292,172 43	\$31,945,900 83
	ORE AND FOREST ROADS.			
1	Bear Lake & Eastern.....	1,384 99	824 18	3,362 24
2	Buckley & Douglas.....	b 7,520 52	2,170 51	4,126 94
3	Crawford & Manistee River.....	6,681 29	1,552 18	4,063 44
4	Grass Lake & Manistee River.....	13,942 32		80,937 29
5	Hecla & Torch Lake.....			
6	Hobart & Manistee River.....	11,081 43	3,078 17	15,390 66
7	Lake County.....	2,600 00	2,098 48	11,253 29
8	Manistee & Luther.....	11,246 21	20,015 28	35,349 38
9	North Branch & Sauble River.....			9,163 29
	Total for ore and forest roads.....	\$54,456 76	\$29,733 80	\$163,896 73
	Total for all roads.....	\$13,325,210 77	\$10,321,906 23	\$32,109,857 56

## 10.—ANALYSIS OF EARNINGS AND EXPENSES.

Line No.	Railroads.	Miles of Road Operated.	Traffic Earnings.		
			Total.	Per Train	
				Passenger.	Freight.
1	Battle Creek & Sturgis.....	44.00	\$19,151 16	0.28.60	0.28.11
2	Bay City & Battle Creek.....				
3	Chicago, Detroit & C. G. T. Junction.....	59.37	249,267 61	0.55	0.37
4	Chicago & Grand Trunk.....	335.27	3,731,170 82	0.92	1.13
5	Chicago, Kalamazoo & Saginaw.....	35.66	34,123 69	No report.	
6	Chicago & Northwestern.....	4,250.38	25,945,087 95	1.10.17	1.40.69
7	Chicago & West Michigan.....	408.40	1,374,893 30	0.63	1.63
8	Cincinnati, Jackson & Mackinaw.....	348.10	525,730 68	0.53	0.91
9	Cin., Jackson & Mack.—W. H. Brown, Rec.....	b 94.911 77	94,911 77	0.67	1.03
10	Cincinnati, Wabash & Michigan.....	164.40	534,062 59	0.74	1.38
11	Detroit, Bay City & Alpena.....	206.32	485,105 76	1.64	0.99
12	Detroit, Grand Haven & Milwaukee.....	189.00	1,065,823 05	0.90	1.50
13	Detroit, Lansing & Northern.....	323.68	1,121,413 86	0.80	1.35
14	Grand Rapids, Lansing & Detroit.....				
15	Saginaw & Western.....				
16	Duluth, South Shore & Atlantic.....	577.77	1,983,026 99	0.96	1.17
17	Marquette, Houghton & Ontonagon.....				
18	Marquette & Western.....				
19	Flint & Pere Marquette.....	624.94	2,332,279 60	0.77	1.32
20	Manistee.....				
21	Port Huron & Northwestern.....				
22	Saginaw & Clare County.....				
23	Saginaw & Mt. Pleasant.....				
24	Frankfort & Southeastern.....	22.			
25	Grand Rapids & Indiana.....	556.94	2,472,220 42	1.00	1.52
26	Hancock & Calumet.....	20.36	134,183 79	0.80	1.79

b For two months only.



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General Expenses, Including Taxes.	Total Expenses and Taxes.	Proportion of Expenses and Taxes for Michigan.	Same for Michigan Previous Year.	Increase, 1889.	Decrease, 1889.	Line No.
\$2,151 84	\$14,243 81	\$14,243 81	\$12,946 54	\$1,296 77		61
1,151,601 76	7,330,539 64	848,965 83	810,206 18	82,759 65		62
257,720 10	1,374,484 98	54,520 59		54,520 59		63
40,546 87	40,546 87	40,546 87	37,406 24	3,138 63		64
						65
\$8,840,848 57	\$64,849,735 84	\$22,390,189 71	\$20,928,473 40	\$1,918,185 66	\$451,469 85	
191 56	5,962 97	5,962 97	4,588 71	1,379 26		1
			24,415 10		24,415 10	2
719 74	14,587 71	14,587 71	7,062 83	7,475 88		3
1,505 75	13,902 66	13,902 66	12,746 46	1,056 20		4
2,524 95	97,454 56	97,454 56	94,165 21	3,289 85		5
1,281 27	30,781 78	30,781 78	36,785 11		6,003 88	6
3,214 81	19,161 06	19,161 06	20,198 22		1,037 14	7
7,644 24	74,235 11	74,235 11	57,843 63	16,911 48		8
	9,168 29	9,168 29		9,168 29		9
\$17,081 82	\$265,119 11	\$265,119 11	\$257,294 77	\$39,274 96	\$31,450 62	
\$8,857,880 89	\$64,614,854 95	\$22,655,308 82	\$21,185,768 17	\$1,952,460 62	\$482,919 97	

Traffic Earnings.		Operating Expenses.				Net per Mile Operated.		Net Earnings. Per Train Mile.	Net Deficit Per Train Mile.	Line No.
Mile.	Per Mile of Road Operated.	Total.	Per Mile of Road Operated.	Per Train Mile.	Percentage of Earnings.	Surplus.	Deficit.			
0.56.71	\$226 55	\$8,208 28	\$197 78	\$0.47	87.18	\$25 27		\$0.15		1
0.98	4,211 37	237,306 70	3,977 08	0.99	94.91	214 29		0.04		2
1.06	11,128 85	2,804,688 79	8,365 40	0.90	75.14	2,768 24		0.26		3
	432 75	17,448 99	480 81		50.20	475 98				4
1.30.46	6,104 18	16,307,710 37	3,398 76	0.82	62.28	8,223 93		0.49.67		5
1.17	3,368 45	1,018,465 79	2,498 79	0.87	74.08	872 59		0.30		6
0.73	1,510 29	458,004 56	1,315 72	0.63	86.67	202 42		0.10		7
0.87	272 66	78,024 79	224 14	0.71	82.15	48 70		0.16		8
1.00	8,248 55	377,613 78	2,296 92	0.71.24	70.70	951 63		0.29.52		9
0.89	2,392 62	290,791 37	1,428 04	0.53	59.91	964 58		0.36		10
1.15	5,639 28	822,982 81	4,354 40	0.89	76.44	1,341 96		0.27		11
1.08	3,464 56	806,924 02	2,492 96	0.74	71.28	1,004 27		0.30		12
1.10	3,345 67	1,161,515 28	2,010 34	0.66.70	59.90	1,410 31		0.46.70		13
1.87	3,732 01	1,552,164 33	2,483 01	1.24	66.55	1,248 50		0.63		14
1.28	5,245 09	1,670,353 62	3,543 84	0.86	66.92.8	1,751 18		0.43		15
1.53	6,599 57	78,044 08	3,833 20	0.89	58	2,780 61		0.64		16

## 10.—ANALYSIS OF EARNINGS AND EXPENSES.—CONTINUED.

Line No.	Railroads.	Miles of Road Operated.	Traffic Earnings.		
			Total.	Per Train	
				Passenger.	Freight.
27	Lake Shore & Michigan Southern	1,400.55	\$19,236,564 21	1.60.40	1.71.90
28	Detroit, Hillsdale & Southwestern				
29	Detroit, Monroe & Toledo				
30	Fort Wayne & Jackson				
31	Kalamazoo, Allegan & Grand Rapids				
32	Kalamazoo & White Pigeon				
33	Northern Central Michigan				
34	Lowell & Hastings	12.00	3,586 14	No	report.
35	Manistee & Northeastern	24.00	46,620 09	0.74.60	1.50.66
36	Manistique	40.75	44,685 99	No	report.
37	Mason & Oceana	34.00	39,599 80	0.31.09	1.00
38	Michigan Air Line Railway	106.60	152,640 45	0.22	0.59
39	Michigan Central System	1,556.47	13,662,204 22	1.30	1.47
40	Canada Southern Bridge				
41	Detroit & Bay City				
42	Grand River Valley				
43	Jackson, Lansing & Saginaw				
44	Kalamazoo & South Haven				
45	Michigan Air Line R. R.				
46	Michigan Midland & Canada				
47	Saginaw Bay & Northwestern				
48	Toledo, Canada Southern & Detroit				
49	Milwaukee, Lake Shore & Western	691.75	3,474,667 29	0.78.60	1.83
50	Milwaukee & Northern	320.45	1,226,604 31	0.73	1.93.50
51	Mineral Range	17.00	106,384 45	1.02	1.75
52	Minneapolis, St. Paul & Sault Ste. Marie	799.85	1,623,294 39	0.70	1.40
53	Muskegon, Grand Rapids & Indiana	a		No	report.
54	Ontonagon & Brule River	46.10	5,730 43		
55	Pontiac, Oxford & Northern	100.20	102,000 27	0.50	1.14
56	Saginaw, Tuscola & Huron	96.57	106,370 05	0.49	1.09
57	Saginaw Valley & St. Louis	45.10	96,366 01	0.89	1.52
58	Saginaw & Grand Rapids				
59	Toledo, Ann Arbor & North Michigan	\$23.20	953,029 78	0.76.45	1.65
60	Toledo, Saginaw & Muskegon	96.00	91,370 24	0.59	1.00
61	Toledo & South Haven	36.60	24,182 98	0.51.35	0.50.10
62	Traverse City	a			
63	Wabash	337.30	1,807,968 87	0.59.62	1.27.60
64	Wisconsin Central	346.29	2,006,371 44	0.74.77	1.59
65	Detroit Union R. R. Depot & Station Co.				
	Total commercial roads	14,576.37	\$36,861,919 45	1.04.04	1.32.53
	ORE AND FOREST ROADS.				
1	Bear Lake & Eastern	18.00	10,708 61	0.02.13	0.02.65
2	Buckley & Douglas				
3	Crawford & Manistee River	13.00	14,735 86		1.54.66
4	Grass Lake & Manistee River	13.50	12,787 32		0.72.03
5	Hecla & Torch Lake	7.50	97,454 56		
6	Hobart & Manistee River	9.24	32,281 73		2.61
7	Lake County	11.00	20,061 06		
8	Manistee & Luther	64.00	137,398 23		
9	North Branch & Sauble River	10.00	12,399 44		
	Total ore and forest roads	146.24	\$337,806 83	0.02.13	0 08.52.6
	Total for all roads	14,722.61	\$37,219,726 28	1.04.04	1.33.02

a Included with Grand Rapids &amp; Indiana.

# TABULAR STATEMENT.

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## ANALYSIS OF EARNINGS AND EXPENSES.—CONTINUED.

Traffic Earnings.		Operating Expenses.				Net per Mile Operated.		Net Earnings per Train Mile.	Net Deficit per Train Mile.	Line No.
Mile.	Per Mile of Road Operated.	Total.	Per Mile of Road Operated.	Per Train Mile.	Percentage of Earnings.	Surplus.	Deficit.			
Total.										
1.71	18,647 81	\$12,847,451 57	9,114 57	1.14.20	65.98	4,710 55		0.59		27
										28
										29
										30
										31
										32
										33
										34
0.21	298 84	5,099 90	424 90		142		\$126 06			34
1.07	1,942 50	44,108 88	1,837 66	1.01.78	94.60	104 84		0.58.06		35
0.74	1,064 76	24,897 62	598 72	0.41	54.60	497 87		0.34		36
0.74	1,466 66	39,218 10	1,452 52	0.73	99	14 14		0.01		37
0.81	1,445 45	180,574 95	1,236 50	0 69	85.54	208 96		0.12		38
1.40	8,790 54	9,895,158 32	6,357 44	1.01	71.77	2,500 88		0.40		39
										40
										41
										42
										43
										44
										45
										46
										47
										48
1.45	5,023 01	1,954,203 97	2,825 07	0.81.70	56.24	2,197 93		0.63.54		49
1.31	3,851 79	838,852 01	2,634 36	0.89.50	68.14	1,231 53		0.42		50
1.41	6,199 08	61,980 23	8,642 95	0.83	56	2,614 30		0.64		51
1.14	2,029 49	1,063,066 75	1,329 08	0.75	64.30	735 77		0.41		52
	124 30	11,062 44	240 62	No report.			240 62			53
										54
0.72.19	1,020 00	91,831 66	918 32	0.65	89.96	102 37		0.07.25		55
0.73	1,900 87	77,029 41	1,157 11	0.53.20	72	449 97		0.20.70		56
1.10	2,127 63	57,958 62	1,285 11	0.67	59.86	681 53		0.44		57
										58
1.24.50	3,318 34	668,180 69	2,326 36	0.87.20	65.87	1,205 85		0 45.23		59
0.52	956 98	89,893 96	936 40	0.51	97.85	20 58		0.01		60
0.51.09	660 74	14,243 31	380 92	0.30.09	58.07	279 82		0.21.09		61
										62
1.20.50	6,778 76		5,002 07	0.89.97	78.78	1,776 79		0.31.53		63
1.13	5,792 24	1,374,484 98	3,988 02	0.81	68	1,843 50		0.37		64
										65
1.21.74	5,960 46	\$64,349,735 84	4,414 66	0.98.94	74.05	1,545 80		0.27.80		
0.26.80	594 92	5,962 97	331 27	1.49	55	268 41		1.18		1
										2
1.54.66	1,478 59	14,537 71	1,433 77	1.54.66	96.66	19 81		0.28		3
0.72.03	1,065 61	13,902 66	1,150 22	0.78.10	1.08		84 61		06.10	4
2.00	12,993 94	97,454 56	12,993 94		2.00	100 00				5
2.01	3,498 69	80,781 73	3,331 26	1.92	95.34	182 43		0.09		6
	1,623 73	19,161 06	1,741 91		95	81 82				7
	2,146 69	74,255 11	1,160 23		54	966 46				8
	1,238 94	9,163 29	916 33		73.96	322 61				9
0.35.26	2,309 95	\$265,119 11	1,812 90		78.45	497 05				
1.22.19	5,924 22	\$64,614,854 95	4,388 81		74.08	1,535 41				

## MICHIGAN RAILROAD RETURNS.

## 11.—TRAIN MILEAGE AND TRAFFIC.

Line No.	Railroads.	Train Mileage.		
		Passenger Trains, Miles.	Freight Trains, Miles.	Total for Trains Earn- ing Revenue.
1	Battle Creek & Sturgis.....		17,220	17,220
2	Bay City & Battle Creek.....			
3	Chicago, Detroit & C. G. T. Junction.....	145,232	122,646	267,878
4	Chicago & Grand Trunk.....	1,173,884	2,354,814	3,528,648
5	Chicago, Kalamazoo & Saginaw.....			
6	Chicago & Northwestern.....	6,669,722	13,218,048	19,887,770
7	Chicago & West Michigan.....	669,108	500,908	1,170,011
8	Cincinnati, Jackson & Mackinaw.....	328,704	390,265	718,969
9	Cincinnati, Jackson & Mackinaw—W. H. Brown, Rec.....	42,664	65,853	108,517
10	Cincinnati, Wabash & Michigan.....	809,762	220,267	530,029
11	Detroit, Bay City & Alpena.....	66,150	482,178	548,328
12	Detroit, Grand Haven & Milwaukee.....	457,918	466,240	924,158
13	Detroit, Lansing & Northern.....	644,066	448,102	1,092,197
14	Grand Rapids, Lansing & Detroit.....			
15	Saginaw & Western.....			
16	Duluth, South Shore & Atlantic.....	519,971	1,222,782	1,742,753
17	Marquette, Houghton & Ontonagon.....			
18	Marquette & Western.....			
19	Flint & Pere Marquette.....	148,184	1,100,964	1,249,138
20	Manistee.....			
21	Port Huron & Northwestern.....			
22	Saginaw & Clare County.....			
23	Saginaw & Mt. Pleasant.....			
24	Frankfort & Southeastern.....	896,046	1,036,725	1,934,771
25	Grand Rapids & Indiana.....	22,447	64,868	87,315
26	Hancock & Calumet.....			
27	Lake Shore & Michigan Southern.....	3,947,496	7,296,395	11,243,891
28	Detroit, Hillsdale & Southwestern.....			
29	Detroit, Monroe & Toledo.....			
30	Fort Wayne & Jackson.....			
31	Kalamazoo, Allegan & Grand Rapids.....			
32	Kalamazoo & White Pigeon.....			
33	Northern Central Michigan.....			
34	Lowell & Hastings.....			
35	Manistee & Northeastern.....	24,545	18,780	43,325
36	Manistique.....		60,000	60,000
37	Mason & Oceana.....	19,710	33,650	53,360
38	Michigan Air Line railway.....	67,192	120,254	187,446
39	Michigan Central.....	3,808,281	5,946,385	9,754,666
40	Canada Southern Bridge.....			
41	Detroit & Bay City.....			
42	Grand River Valley.....			
43	Jackson, Lansing & Saginaw.....			
44	Kalamazoo & South Haven.....			
45	Michigan Air Line railroad.....			
46	Michigan Midland & Canada.....			
47	Saginaw Bay & Northwestern.....			
48	Toledo, Canada Southern & Detroit.....			
49	Milwaukee, Lake Shore & Western.....	866,067	1,526,718	2,392,775
50	Milwaukee & Northern.....	479,488	457,862	936,390
51	Mineral Range.....	34,680	89,884	74,514
52	Minneapolis, St. Paul & Sault Ste. Marie.....	507,202	921,627	1,428,829
53	Muskegon, Grand Rapids & Indiana.....			
54	Ontonagon & Brule River.....			
55	Pontiac, Oxford & Northern.....	64,548	76,737	141,285
56	Saginaw, Tuscola & Huron.....	80,204	58,583	144,737
57	Saginaw Valley & St. Louis.....	58,505	28,762	87,267
58	Saginaw & Grand Rapids.....			
59	Toledo, Ann Arbor & North Michigan.....	349,251	416,177	765,428
60	Toledo, Saginaw & Muskegon.....	108,637	71,393	175,080

a Included with G. R. &amp; I.

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## TRAIN MILEAGE AND TRAFFIC.—CONTINUED.

Passenger Traffic.						Line No.
Through Passengers, Number.	Local Passengers, Number.	Total Passengers, Number.	Total Passengers Previous Year, Number.	Passengers Carried 1 Mile, Number.	Passengers Carried 1 Mile Previous Year, Number.	
						1
						2
29,262	179,389	208,651	175,655	4,827,620	5,089,948	3
113,949	720,296	834,247	780,827	59,120,063	60,548,518	4
						5
51,906	11,845,387	11,897,293	11,052,386	284,440,589	275,286,256	6
						7
4,462	674,608	679,070	667,679	22,849,720	19,667,587	8
81,795	245,525	277,320	309,918	6,188,915	6,760,304	9
2,598	45,582	48,180		891,241		10
1,720	340,644	342,364	335,914	8,560,949	8,181,186	11
	113,764	113,764	120,496	8,564,436	8,485,688	12
4,251	591,851	596,102	680,101	18,189,565	19,591,344	13
						14
15,118	680,785	695,903	621,956	18,400,060	16,758,611	15
						16
39,353	312,579	351,932	337,344	13,720,911	11,339,702	17
						18
						19
16,714	1,145,165	1,161,879	966,851	31,132,008	25,119,906	20
			224,875		6,685,428	21
						22
						23
						24
53,488	1,021,400	1,074,888	1,109,281	32,674,483	33,708,641	25
	55,779	55,779	56,157	885,509	459,010	26
						27
104,474	4,309,118	4,413,592	4,051,704	223,535,555	210,107,096	28
						29
						30
						31
						32
						33
						34
34	39,782	39,816		660,333		35
	1,004	1,004		12,048		36
	10,670	10,670	9,490	149,890	150,860	37
55	83,343	83,396	85,245	1,106,959	1,264,625	38
						39
113,827	3,044,546	3,158,373	3,007,801	187,646,148	185,214,984	40
						41
						42
						43
						44
						45
						46
						47
						48
						49
30,437	516,888	547,325	505,546	22,273,484	20,996,318	50
21,215	284,401	305,616	270,836	11,287,635	10,046,721	51
	115,924	115,924	107,145	857,519		52
31,286	164,646	195,932	117,872	12,083,260	4,404,621	53
						54
						55
740	73,622	74,362	77,513	1,505,336	1,560,917	56
3,502	69,271	72,773	69,697	1,774,645	1,744,008	57
902	97,525	98,427	106,245	1,796,585	1,968,960	58
						59
211	244,403	244,614	194,137	8,159,255	6,564,266	60
1,981	52,722	54,653	18,425	1,072,601	389,223	

## MICHIGAN RAILROAD RETURNS.

## 11.—TRAIN MILEAGE AND TRAFFIC.—CONTINUED.

Line No.	Railroads.	Train Mileage.		
		Passenger Trains, Miles.	Freight Trains, Miles.	Total for Trains Earn- ing Revenue.
61	Toledo & South Haven.....	23,404	18,936	47,340
62	Traverse City.....			
63	Wabash.....	3,306,876	4,982,361	8,289,237
64	Wisconsin Central.....	827,836	969,045	1,696,881
65	Detroit Union Railroad Depot & Station Company.....			
	Total for commercial roads.....	26,675,694	44,606,849	71,282,543
	ORE AND FOREST ROADS.			
1	Bear Lake & Eastern.....		4,000	4,000
2	Buckley & Douglas.....			
3	Crawford & Manistee River.....		9,520	9,520
4	Grass Lake & Manistee River.....		17,630	17,630
5	Hecla & Torch Lake.....		48,465	48,465
6	Hobart & Manistee River.....		16,000	16,000
7	Lake County.....			
8	Manistee & Luther.....			
	Total for ore and forest roads.....		95,665	95,665
	Total for all roads.....	26,675,694	44,702,514	71,378,208

## 11A.—TRAFFIC.

Line No.	RAILROADS.	Passenger Travel		
		Average distance traveled by each Passenger, Miles.	Average Fare paid by each Passenger.	Average Through Rate per Mile.
1	Battle Creek & Sturgis.....			
2	Bay City & Battle Creek.....			
3	Chicago, Detroit & C. G. T. Junction.....	23.14	\$0 62	\$0 02.50
4	Chicago & Grand Trunk.....	70.90	1 22	0 01.69
5	Chicago, Kalamazoo & Saginaw.....			
6	Chicago & Northwestern.....	23.95	0 54	0 02.41
7	Chicago & West Michigan.....	35.55	0 73	0 01.38
8	Cincinnati, Jackson & Mackinaw.....	22.13	0 50	0 01.98
9	Cincinnati, Jackson & Mackinaw—W. H. Brown, Rec.....	18.50	0 47	0 02.670
10	Cincinnati, Wabash & Michigan.....	25.	0 60.30	0 02.
11	Detroit, Bay City & Alpena.....	31.33	0 78	
12	Detroit, Grand Haven & Milwaukee.....	30.50	73	0 02.31
13	Detroit, Lansing & Northern.....	26.442	0 66.34	0 02.30
14	Grand Rapids, Lansing & Detroit.....			
15	Saginaw & Western.....			
16	Duluth, South Shore & Atlantic.....	33.90	1 30	0 08.40
17	Marquette, Houghton & Ontonagon.....			
18	Marquette & Western.....			
19	Flint & Pere Marquette.....	26.	0 66	0 02.370
20	Manistee.....			
21	Port Huron & Northwestern.....			
22	Saginaw & Clare County.....			
23	Saginaw & Mt. Pleasant.....			
24	Frankfort & Southeastern.....			
25	Grand Rapids & Indiana.....	30.58	0 73	0 02.535
26	Hancock & Calumet.....	6.91	0 30.41	

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## TRAIN MILEAGE AND TRAFFIC.—CONTINUED.

Passenger Traffic.						Line No.
Through Passengers, Number.	Local Passengers, Number.	Total Passengers, Number.	Total Passengers Previous Year, Number.	Passengers Carried 1 Mile, Number.	Passengers Carried 1 Mile Previous Year, Number.	
	37,410	37,410	38,708	408,908	508,358	61
	2,174,065	2,174,065	1,351,607	109,667,067	79,937,362	62
	1,169,961	1,169,961		51,449,644		63
						64
						65
673,253	30,461,907	31,135,160	27,391,096	1,139,514,474	1,017,495,399	
						1
						2
						3
						4
						5
						6
	890	890		13,350		7
						8
				13,350		
673,253	30,462,797	31,136,050	27,391,096	1,139,527,824	1,017,495,399	

## TRAFFIC.—CONTINUED.

and Rates.		Freight Movements.				Line No.
Average Local Rate per Mile.	Average Rate per Mile for all Passengers.	Tons of Through Freight moved, Number.	Tons of Local Freight moved, Number.	Total Tons of Freight moved, Number.	Total Tons of Freight moved previous year, Number.	
						1
\$0 02.75	\$0 02.66	93,460	221,179	314,639	363,167	2
0 02.13	0 01.72	1,054,877	686,319	1,741,196	1,486,908	3
						4
0 02.23	0 02.24	313,961	11,566,216	11,880,177	11,107,068	5
0 03.99	0 02.18	9,184	874,708	883,892	986,270	6
0 02.36	0 02.26	184,063	396,635	582,717	591,750	7
0 02.570	0 02.580	48,496	60,137	108,633		8
0 02.40	0 02.40	44,624	330,303	374,927	336,830	9
0 02.49	0 02.49		871,763	871,763	498,547	10
0 02.39	0 02.38	87,925	470,950	567,875	577,871	11
						12
0 02.55	0 02.50	47,141	439,483	486,624	453,355	13
						14
0 08.00	0 08.30	1,712,672	342,785	2,055,457	1,417,479	15
						16
						17
0 02.497	0 02.492	133,968	1,462,920	1,596,188	1,574,002	18
						19
					90,399	20
						21
						22
						23
0 02.409	0 02.417	153,707	1,630,867	1,786,574	1,665,157	24
0 04.40	0 04.40		616,493	616,493	516,877	25
						26

## MICHIGAN RAILROAD RETURNS.

## 11A.—TRAFFIC.—CONTINUED.

Line No.	Railroads.	Passenger Travel		
		Average distance traveled by each Passenger. Miles.	Average Fare paid by each Passenger.	Average Through Rate per Mile.
27	Lake Shore & Michigan Southern System.....	50.50	\$1 15	\$0 02.168
28	Detroit, Hilladale & Southwestern.....			
29	Detroit, Monroe & Toledo.....			
30	Fort Wayne & Jackson.....			
31	Kalamazoo, Allegan & Grand Rapids.....			
32	Kalamazoo & White Pigeon.....			
33	Northern Central Michigan.....			
34	Lowell & Hastings.....			
35	Manistee & Northeastern.....	16.57	0 25.30	0 02.73
36	Manistique.....	12.	0 48	
37	Mason & Oceana.....	14.	0 47	
38	Michigan Air Line Railway.....	13.27	0 38.06	0 02.50
39	Michigan Central System.....	59.41	1 37	0 01.98
40	Canada Southern Bridge.....			
41	Detroit & Bay City.....			
42	Grand River Valley.....			
43	Jackson, Lansing & Saginaw.....			
44	Kalamazoo & South Haven.....			
45	Michigan Air Line R. R.....			
46	Michigan Midland & Canada.....			
47	Saginaw Bay & Northwestern.....			
48	Toledo, Canada Southern & Detroit.....			
49	Milwaukee, Lake Shore & Western.....	40.70	1 07	0 02.546
50	Milwaukee & Northern.....	37.	1 01	0 02.58
51	Mineral Range.....	7.33	0 28.88	
52	Minneapolis, St. Paul & Sault Ste. Marie.....	61.43	1 57	0 02.13
53	Muskegon, Grand Rapids & Indiana.....	a		
54	Ontonagon & Brule River.....			
55	Pontiac, Oxford & Northern.....	20.20	0 50.45	0 01.38
56	Saginaw, Tuscola & Huron.....	24.	0 53	0 02.782
57	Saginaw Valley & St. Louis.....	18.	0 49.12	0 02.81
58	Saginaw & Grand Rapids.....			
59	Toledo, Ann Arbor & North Michigan.....	33.35	0 92.61	0 02.47
60	Toledo, Saginaw & Muskegon.....	19.60	0 51	0 02.07
61	Toledo & South Haven.....	10.99	0 328	0 03.
62	Traverse City.....	a		
63	Wabash.....	50.10	1 11.08	
64	Wisconsin Central.....	43.98	0 90.70	
65	Detroit, Union R. R. Depot & Station Co.....			
	Total commercial roads.....	30.63	0 75.42	
	ORE AND FOREST ROADS.			
1	Bear Lake & Eastern.....			
2	Buckley & Douglas.....			
3	Crawford & Manistee River.....			
4	Grass Lake & Manistee River.....			
5	Hecla & Torch Lake.....			
6	Hobart & Manistee River.....			
7	Lake County.....			
8	Manistee & Luther.....	0.15	0 45	
9	North Branch & Sauble River.....			
	Total ore and forest roads.....			
	Total for all roads.....	30.63	0 75.41	

a Included with G. R. &amp; I.



TABULAR STATEMENT.

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TRAFFIC.—CONTINUED.

and Rates.		Freight Movements.				Line No.
Average Local Rate per Mile.	Average Rate per Mile for all Passengers.	Tons of Through Freight moved. Number.	Tons of Local Freight moved. Number.	Total Tons of Freight moved Number.	Total Tons of Freight moved previous year. Number.	
\$0 02.323	\$0 02.284	1,237,110	8,783,439	10,020,599	9,069,857	27
						28
						29
						30
						31
						32
						33
						34
0 02.73	0 02.73		117,040	117,040		35
0 04.	0 04.		139,080	139,080	108,450	36
0 03.	0 03.		70,800	70,800	63,307	37
0 02.90	0 02.89	13,394	182,908	196,302	246,414	38
0 02.42	0 02.31	1,427,679	4,872,269	6,299,948	6,231,421	39
						40
						41
						42
						43
						44
						45
						46
						47
						48
0 02.637	0 02.673	1,022,163	1,323,352	2,345,535	2,120,886	49
0 02.80	0 02.74	431,273	253,536	689,859	542,787	50
0 03.90	0 03.90		115,520	115,520	93,759	51
0 02.94	0 02.54	177,263	670,602	847,365	315,442	52
						53
						54
0 02.55	0 02.49	2,902	52,510	55,412	61,489	55
0 02.047	0 02.201	3,165	82,825	85,990	66,964	56
0 02.68	0 02.68	1,947	55,768	57,715	62,166	57
						58
0 02.77	0 02.77	46,841	816,935	863,776	652,940	59
0 02.73	0 02.62	18,295	61,857	78,152	22,467	60
0 03.	0 03.		11,673	11,673	10,522	61
						62
	0 02.20		4,754,790	4,754,790	2,799,733	63
	0 02.06		2,142,508	2,142,508		64
						65
	0 02.43	8,266,149	44,994,065	53,260,214	44,078,949	
						1
					45,910	2
			60,752	60,752	342,285	3
			46,230	46,230	33,700	4
			921,900	921,900	869,500	5
						6
			103,300	103,300	118,740	7
			80,244	80,244	78,773	8
			96,624	96,624		9
			1,309,050	1,309,050	1,488,908	
	0 02.43	8,266,149	46,308,115	54,569,264	45,567,857	

## MICHIGAN RAILROAD RETURNS.

## 11 B.—TRAFFIC.—CONTINUED.

## Freights.

Line No.	Railroads.	Mileage.			
		Through Freight.	Local Freight.	Total or Tons Moved One Mile.	Moved One Mile Previous Year.
1	Battle Creek & Sturgis.....				
2	Bay City & Battle Creek.....				
3	Chicago, Detroit & C. G. T. Junction.....	5,514,140	5,124,870	10,639,010	12,215,610
4	Chicago & Grand Trunk.....	348,763,318	88,159,599	436,922,915	574,961,777
5	Chicago, Kalamazoo & Saginaw.....	No report.			
6	Chicago & Northwestern.....	130,810,745	1,686,848,065	1,817,658,890	1,911,951,168
7	Chicago & West Michigan.....	1,274,455	57,166,582	58,441,037	60,125,433
8	Cincinnati, Jackson & Mackinaw.....	12,066,679	29,665,520	41,732,199	38,139,450
9	Cin., Jack. & Mack., W. H. Brown, Rec.....	3,178,720	5,260,833	8,439,553	
10	Cincinnati, Wabash & Michigan.....	7,186,497	14,745,342	21,931,839	20,659,357
11	Detroit, Bay City & Alpena.....		29,399,429	29,399,429	17,539,144
12	Detroit, Grand Haven & Milwaukee.....	16,617,686	28,030,425	44,648,111	48,335,342
13	Detroit, Lansing & Northern.....	7,323,722	32,600,399	39,924,121	36,837,668
14	Grand Rapids, Lansing & Detroit.....				
15	Saginaw & Western.....				
16	Duluth, South Shore & Atlantic.....	74,089,708	19,665,597	93,755,300	62,188,902
17	Marquette, Houghton & Ontonagon.....				
18	Marquette & Western.....				
19	Flint & Pere Marquette.....	24,986,373	108,062,505	133,048,878	125,797,758
20	Manistee.....				
21	Port Huron & Northwestern.....				5,247,342
22	Saginaw & Clare County.....				
23	Saginaw & Mt. Pleasant.....				
24	Frankfort & Southeastern.....				
25	Grand Rapids & Indiana.....	11,017,243	144,004,497	155,021,740	154,119,072
26	Hancock & Calumet.....		4,865,039	4,865,039	3,060,879
27	Lake Shore & Michigan Southern.....	541,456,268	1,317,553,554	1,859,009,822	1,799,104,045
28	Detroit, Hillsdale & Southwestern.....				
29	Detroit, Monroe & Toledo.....				
30	Fort Wayne & Jackson.....				
31	Kalamazoo, Allegan & Grand Rapids.....				
32	Kalamazoo & White Pigeon.....				
33	Northern Central Michigan.....				
34	Lowell & Hastings.....				
35	Manistee & Northeastern.....		977,846	977,846	
36	Manistique.....		1,420,658	1,420,658	768,189
37	Mason & Oceana.....		1,412,000	1,412,000	1,329,447
38	Michigan Air Line Railway.....	1,420,078	9,002,224	10,422,302	12,639,868
39	Michigan Central.....	620,958,780	582,161,439	1,203,120,219	1,279,412,576
40	Canada Southern Bridge.....				
41	Detroit & Bay City.....				
42	Grand River Valley.....				
43	Jackson, Lansing & Saginaw.....				
44	Kalamazoo & South Haven.....				
45	Michigan Air Line Railroad.....				
46	Michigan Midland & Canada.....				
47	Saginaw Bay & Northwestern.....				
48	Toledo, Canada Southern & Detroit.....				
49	Milwaukee, Lake Shore & Western.....	161,060,068	102,964,890	264,044,948	191,096,049
50	Milwaukee & Northern.....	54,562,378	18,541,064	73,103,442	64,279,254
51	Mineral Range.....		817,990	817,990	732,225
52	Minneapolis, St. Paul & Sault Ste. Marie.....		181,400,365	181,400,365	75,682,156
53	Muskegon, Grand Rapids & Indiana.....	a			
54	Ontonagon & Brule River.....	No report.			
55	Pontiac, Oxford & Northern.....	290,200	2,035,882	2,326,082	2,446,809
56	Saginaw, Tuscola & Huron.....	212,098	3,415,435	3,627,533	2,390,663
57	Saginaw Valley & St. Louis.....	87,401	1,312,846	1,399,747	1,531,980
58	Saginaw & Grand Rapids.....				
59	Toledo, Ann Arbor & North Michigan.....	7,700,111	57,198,439	64,898,550	39,524,777
60	Toledo, Saginaw & Muskegon.....	1,564,320	2,049,790	3,614,110	378,655

a Included with Grand Rapids &amp; Indiana.

TABULAR STATEMENT.

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TRAFFIC.—CONTINUED.

Freights.

Ton Haul.			Rates.					Line No.
Through Miles.	Local Miles.	All Miles.	Average Amount Each Ton Haul.	Per Ton per Mile. Through.	Per Ton per Mile. Local.	Per Ton per Mile. All.	Average per Ton per Mile Previous Year.	
								1
								2
59	28.17	38.81	\$0 0.82	\$0 00.875	\$0 01.021	\$0 00.945	\$0 02.379	3
330.6	128.5	250.9	1.50	00.52	00.91	00.80	00.87	4
								5
417	146	153	1.56	00.92	01.03	01.02	00.97	6
								7
189	65	66	0.92.63	00.924	01.586	01.406	01.428	8
65.5	74.4	71.6	0.58	00.73	00.84	00.81	00.92	9
65.4	87.4	77.6	0.58	00.68	00.79	00.75		10
165	44.6	58.5	0.78	00.71	01.66	01.35	01.270	11
	33.70	38.70	0.48		01.30	01.30	06	12
189	58.4	78.6	1.02	00.45	01.30	01.30	01.24	13
								14
155	74	82	1.23	01.010	01.619	01.507	01.528	15
								16
43.230	57.37	45.58	0.69	01.60	01.30	01.50	01.65	17
								18
187	74	83	0.90.80	00.607	01.201	01.089	01.109	19
							02.45	20
								21
								22
								23
70.76	88.30	86.77	0.86	00.972	00.992	00.991	00.993	24
	7.89	7.89	0.13.34		02.38	02.38	04.30	25
437.7	150	185.5	1.23.11	00.601	00.689	00.664	00.636	26
								27
								28
								29
								30
								31
								32
								33
								34
	8.35	8.35	0.24.15		02.88	02.88		35
	10.21	10.21	0.32		03	03	04	36
	20	20	0.47		02.3	02.3	05	37
106	49	53	0.56.2	00.90	01.10	01	00.99	38
								39
435	119	191	1.93	00.559	00.904	00.726	00.694	40
								41
								42
								43
								44
								45
								46
								47
								48
157.5	56.4	92.7	0.98	00.737	01.589	01.057	01.131	49
126.50	71.70	1.06	1.26	00.911	02.013	01.192	01.216	50
	7.08	7.08	0.60.34		08.52	08.52	08.63	51
	214	214	1.44			00.674	00.712	52
								53
								54
100	38.8	42	1.01	01.25	02.58	02.42	02.39	55
67	41	42	0.74.600	01.355	01.764	01.769	02.19	56
45	24	24	0.75.70	03.10	03.12	03.12	03.29	57
								58
164.3	70	75	0.75.90	01.08	01	01.01	01.94	59
96	33.1	46.2	0.75	00.34	02.22	01.62	01.95	60

## MICHIGAN RAILROAD RETURNS.

## 11 B.—TRAFFIC.—CONTINUED.

## Freights.

Line No.	Railroads.	Mileage.			
		Through Freight.	Local Freight.	Total or Tons Moved One Mile.	Moved One Mile Previous Year.
61	Toledo & South Haven.....		212,360	212,360	210,440
62	Traverse City.....	a			
63	Wabash.....		932,181,857	932,181,857	460,882,872
64	Wisconsin Central.....		282,618,841	282,618,841	
65	Detroit Union Railroad Depot & Station Co.				
	Total for commercial roads.....	2,082,086,471	5,750,890,702	7,782,977,173	6,806,663,767
	ORE AND FOREST ROADS.				
1	Bear Lake & Eastern.....				367,280
2	Buckley & Douglas.....	b			342,285
3	Crawford & Manistee River.....	No report.			404,400
4	Grass Lake & Manistee River.....	17,680		17,680	
5	Hecla & Torch Lake.....		6,914,250	6,914,250	6,721,230
6	Hobart & Manistee River.....		723,100	723,100	831,190
7	Lake County.....				
8	Manistee & Luther.....	No report.		f	
	Total for ore and forest roads.....	17,680	7,637,350	7,655,030	8,666,395
	Total for all roads.....	2,082,104,151	5,758,528,052	7,790,632,203	6,815,330,162

b Absorbed by Manistee &amp; Northeastern.

## 12.—TONNAGE AND COMMODITIES MOVED.

Line No.	Railroads.	Grain—Tons. 8.58 Per Cent.	Flour—Tons. 2.51 Per Cent.	Provisions, Meats, etc.—Tons. 2.44 Per Cent.
1	Battle Creek & Sturgis.....	1,427	4	6
2	Bay City & Battle Creek.....			
3	Chicago, Detroit & C. G. T. Junction.....	85,920	15,894	4,429
4	Chicago & Grand Trunk.....	809,382	52,147	302,043
5	Chicago, Kalamazoo & Saginaw.....			
6	Chicago & Northwestern.....	1,362,700	148,263	155,806
7	Chicago & West Michigan.....	21,061	9,794	2,805
8	Cincinnati, Jackson & Mackinaw.....	23,717	4,129	1,567
9	Cin., Jackson & Mack., W. H. Brown, Receiver.....	5,312	652	319
10	Cincinnati, Wabash & Michigan.....	31,643	15,258	6,219
11	Detroit, Bay City & Alpena.....	3,080	1,508	1,698
12	Detroit, Grand Haven & Milwaukee.....	62,693	74,101	4,669
13	Detroit, Lansing & Northern.....	30,081	8,755	1,344
14	Grand Rapids, Lansing & Detroit.....			
15	Saginaw & Western.....			
16	Duluth, South Shore & Atlantic.....	23,017	10,752	1,697
17	Marquette, Houghton & Ontonagon.....			
18	Marquette & Western.....			
19	Flint & Pere Marquette.....	62,889	76,162	61,163
20	Manistee.....			
21	Port Huron & Northwestern.....			
22	Saginaw & Clare County.....			
23	Saginaw & Mt. Pleasant.....			
24	Frankfort & Southeastern.....			
25	Grand Rapids & Indiana.....	43,023	18,662	10,966
26	Hancock & Calumet.....	1,380	826	1,103

# TABULAR STATEMENT.

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## TRAFFIC.—CONTINUED.

### Freights.

Ton Haul.			Rates.					Line No.
Through Miles.	Local Miles.	All Miles.	Average Amount Each Ton Haul.	Per Ton per Mile. Through.	Per Ton per Mile. Local.	Per Ton per Mile. All.	Average per Ton per Mile Previous Year.	
	18.86	18.86	\$0 0.82		\$0 04.520	\$0 04.520	\$0 04.49	61
	198.10	198.10	1.42.98		00.72	00.72	00.798	62
	181.91	181.91	1.87		01.089	01.089		63
								64
								65
245.83	125.59	146.18	\$1.11			0 00.759	\$0 01.166	
								1
							08.72	2
10		10	0 0.27.66	\$0 02.75		\$0 02.75	01.75	3
							04.40	4
	7.50	7.50	0.10.5		\$0 02.01	02.01		5
	7	7	0.31.50		04.50	04.50	04.40	6
								7
								8
		5.84	0.25.76			0 044.7	\$0 08.48	
245.83		142.76	1.08			\$0 00.754	\$0 00.794	

## TONNAGE AND COMMODITIES MOVED.—CONTINUED.

Animals—Tons. 3.20 Per Cent.	Other Agricultural Products—Tons. 3.21 Per Cent.	Lumber and Forest Products—Tons. 22.04 Per Cent.	Coal—Tons. 10.90 Per Cent.	Plaster, Cement, Lime and Sand, Tons. 0.97 Per Cent.	Salt—Tons. 1.27 Per Cent.	Line No.
378	452	1,980	541	54	82	1
2,822	33,633	42,983	27,370	926	379	2
164,129	71,085	147,813	82,730	7,678	50,087	3
						4
510,559	402,166	1,275,299	1,302,554	131,070	56,758	5
						6
3,909	36,849	543,705	65,548	22,981	1,823	7
8,465	13,692	84,354	289,964	1,677	1,378	8
3,086	4,155	13,317	60,659	209	413	9
11,521	9,805	128,949	22,529	6,160	2,178	10
459	1,800	842,601	566	208	3,632	11
23,486	36,530	131,185	42,109	9,472	2,621	12
14,537	32,279	299,437	15,567	5,509	5,349	13
						14
2,547	10,876	236,559	66,655	3,456	212	15
						16
						17
12,850		1,048,602	34,163	15,230	64,348	18
						19
						20
						21
						22
						23
10,050	64,979	915,342	88,448	18,857	5,823	24
	317	159,972	9,674			25

## MICHIGAN RAILROAD RETURNS.

## 12.—TONNAGE AND COMMODITIES MOVED.—CONTINUED.

Line No.	Railroads.	Grain—Tons, 8.58 Per Cent.	Flour—Tons, 2.51 Per Cent.	Provisions, Meats, etc.—Tons, 2.44 Per Cent.
27	Lake Shore & Michigan Southern System.....	917,589	420,507	349,514
28	Detroit, Hillsdale & Southwestern.....			
29	Detroit, Monroe & Toledo.....			
30	Fort Wayne & Jackson.....			
31	Kalamazoo, Allegan & Grand Rapids.....			
32	Kalamazoo & White Pigeon.....			
33	Northern Central Michigan.....			
34	Lowell & Hastings.....			
35	Manistee & Northeastern.....	560	29	16
36	Manistique.....			
37	Mason & Oceana.....	572	60	90
38	Michigan Air Line Railway.....	20,373	18,558	609
39	Michigan Central System.....	542,469	144,068	279,638
40	Canada Southern Bridge.....			
41	Detroit & Bay City.....			
42	Grand River Valley.....			
43	Jackson, Lansing & Saginaw.....			
44	Kalamazoo & South Haven.....			
45	Michigan Air Line R. R.....			
46	Michigan Midland & Canada.....			
47	Saginaw Bay & Northwestern.....			
48	Toledo, Canada Southern & Detroit.....			
49	Milwaukee, Lake Shore & Western.....	23,239	12,784	15,255
50	Milwaukee & Northern.....	48,698	16,698	14,037
51	Mineral Range.....	3,213	1,868	11,865
52	Minneapolis, St. Paul & Sault Ste. Marie.....	116,664	158,994	3,959
53	Muskegon, Grand Rapids & Indiana.....			
54	Ontonagon & Brule River.....			
55	Pontiac, Oxford & Northern.....	9,531	2,187	
56	Saginaw, Tuscola & Huron.....	3,146	1,118	957
57	Saginaw Valley & St. Louis.....	4,725	729	671
58	Saginaw & Grand Rapids.....			
59	Toledo, Ann Arbor & North Michigan.....	32,942	27,656	816
60	Toledo, Saginaw & Muskegon.....	8,562	2,926	243
61	Toledo & South Haven.....	875	710	96
62	Traverse City.....			
63	Wabash.....	779,547	91,990	59,334
64	Wisconsin Central.....	43,401	34,134	7,331
65	Detroit, Union R. R. Depot & Station Co.....			
	Total for commercial roads.....	4,578,876	1,361,452	1,299,860
	ORE AND FOREST ROADS.			
1	Bear Lake & Eastern.....			
2	Buckley & Douglas.....			
3	Crawford & Manistee River.....			
4	Grass Lake & Manistee River.....			
5	Hecla & Torch Lake.....	300		
6	Hobart & Manistee River.....			
7	Lake County.....			
8	Manistee & Luther.....			
	Total for ore and forest roads.....	300		
	Total for all roads.....	4,578,876	1,361,452	1,299,860

\* Included with G. R. & I. report.

TABULAR STATEMENT.

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TONNAGE AND COMMODITIES MOVED.—CONTINUED.

Animals—Tons. 3.20 Per Cent.	Other Agricultural Products—Tons. 3.31 Per Cent.	Lumber and Forest Products—Tons. 22.04 Per Cent.	Coal—Tons. 10.90 Per Cent.	Plaster, Cement, Lime and Sand, Tons. 0.97 Per Cent.	Salt—Tons. 1.27 Per Cent.	Line No.
455,138	350,631	820,222	1,408,288	142,208	46,531	27
-----	-----	-----	-----	-----	-----	28
-----	-----	-----	-----	-----	-----	29
-----	-----	-----	-----	-----	-----	30
-----	-----	-----	-----	-----	-----	31
-----	-----	-----	-----	-----	-----	32
-----	-----	-----	-----	-----	-----	33
-----	10	116,329	2	8	10	34
-----	-----	137,115	-----	-----	-----	35
10	5	66,171	5	20	45	36
2,638	17,891	33,147	25,919	460	879	37
-----	-----	-----	-----	-----	-----	38
216,722	315,561	1,929,280	771,518	27,146	243,433	39
-----	-----	-----	-----	-----	-----	40
-----	-----	-----	-----	-----	-----	41
-----	-----	-----	-----	-----	-----	42
-----	-----	-----	-----	-----	-----	43
-----	-----	-----	-----	-----	-----	44
-----	-----	-----	-----	-----	-----	45
-----	-----	-----	-----	-----	-----	46
-----	-----	-----	-----	-----	-----	47
-----	-----	-----	-----	-----	-----	48
5,778	5,480	758,787	67,408	6,622	1,727	49
4,798	11,822	213,102	25,541	22,766	3,091	50
225	1,503	58,981	9,844	-----	-----	51
9,177	22,985	312,406	53,056	6,699	3,505	52
-----	-----	-----	-----	-----	-----	53
-----	-----	-----	-----	-----	-----	54
3,319	5,376	20,798	3,021	288	1,476	55
83	909	35,958	114	1,665	403	56
181	895	33,158	420	862	5,773	57
-----	-----	-----	-----	-----	-----	58
5,394	23,029	205,477	325,484	4,558	57,302	59
2,404	10,231	37,115	1,987	462	229	60
322	1,661	5,604	259	84	171	61
-----	-----	-----	-----	-----	-----	62
211,929	132,835	308,124	967,236	50,604	116,494	63
20,633	91,831	404,028	68,888	27,779	2,968	64
-----	-----	-----	-----	-----	-----	65
1,707,387	1,715,023	11,354,047	5,789,259	513,911	678,585	-----
-----	-----	-----	-----	-----	-----	1
-----	-----	60,752	-----	-----	-----	2
-----	-----	46,230	-----	-----	-----	3
-----	-----	-----	-----	-----	-----	4
-----	-----	30,000	33,000	600	-----	5
-----	-----	103,300	-----	-----	-----	6
-----	-----	80,244	-----	-----	-----	7
-----	-----	95,509	-----	-----	-----	8
-----	-----	-----	-----	-----	-----	-----
-----	-----	416,035	33,000	600	-----	-----
-----	-----	-----	-----	-----	-----	-----
1,707,337	1,715,023	11,770,062	5,821,259	514,511	678,585	-----

## 12 A.—TONNAGE AND COMMODITIES MOVED.—CONTINUED.

Line No.	Railroads.	Petroleum and Charcoal. Tons. 1.48 Per Cent.	Railroad Rails. Tons. .49 Per Cent.	Pig and Bloom Iron. Tons. 1.30 Per Cent.	Other Iron and Castings. Tons. 1.94 Per Cent.
1	Battle Creek & Sturgis.....			354	51
2	Chicago & Canada Southern.....				
3	Chicago, Detroit & C. G. T. Junction.....	3,298	40	603	955
4	Chicago & Grand Trunk.....	4,894	20,252	6,611	10,253
5	Chicago, Kalamazoo & Saginaw.....				
6	Chicago & Northwestern.....	111,074	74,067	189,316	145,045
7	Chicago & West Michigan.....	3,766	12,090	17,298	10,951
8	Cincinnati, Jackson & Mackinaw.....	3,409	752	30,850	3,838
9	Cin., Jack. & Mack., W. H. Brown, Receiver,	1,103	55	9,649	1,434
10	Cincinnati, Wabash & Michigan.....	9,781	1,727	3,879	14,913
11	Detroit, Bay City & Alpena.....	466	2,514		510
12	Detroit, Grand Haven & Milwaukee.....	1,436	560	1,847	6,354
13	Detroit, Lansing & Northern.....	8,100	2,434	1,989	7,445
14	Grand Rapids, Lansing & Detroit.....				
15	Saginaw & Western.....				
16	Duluth, South Shore & Atlantic.....	2,098	23,234	32,918	3,740
17	Marquette, Houghton & Ontonagon.....				
18	Marquette & Western.....				
19	Flint & Pere Marquette.....				
20	Manistee.....				
21	Port Huron & Northwestern.....				
22	Saginaw & Clare County.....				
23	Saginaw & Mt. Pleasant.....				
24	Frankfort & Southeastern.....				
25	Grand Rapids & Indiana.....	13,758	10,694	42,501	38,629
26	Hancock & Calumet.....				
27	Lake Shore & Michigan Southern System.....	496,302	26,857	190,139	574,423
28	Detroit, Hillsdale & Southwestern.....				
29	Detroit, Monroe & Toledo.....				
30	Fort Wayne & Jackson.....				
31	Kalamazoo, Allegan & Grand Rapids.....				
32	Kalamazoo & White Pigeon.....				
33	Northern Central Michigan.....				
34	Lowell & Hastings.....				
35	Manistee & Northeastern.....	17			14
36	Manistique.....				
37	Mason & Oceana.....	27	60		5
38	Michigan Air Line.....	229	64	96	1,017
39	Michigan Central System.....	79,274	26,907	98,713	115,297
40	Canada Southern Bridge.....				
41	Detroit & Bay City.....				
42	Grand River Valley.....				
43	Jackson, Lansing & Saginaw.....				
44	Kalamazoo & South Haven.....				
45	Michigan Air Line railroad.....				
46	Michigan Midland & Canada.....				
47	Saginaw Bay & Northwestern.....				
48	Toledo, Canada Southern & Detroit.....				
49	Milwaukee, Lake Shore & Western.....		342	6,622	9,586
50	Milwaukee & Northern.....	1,395	3,097	20,003	5,243
51	Mineral Range.....				
52	Minneapolis, St. Paul & Sault Ste. Marie.....	295	3,826	1,589	3,470
53	Muskegon, Grand Rapids & Indiana.....				
54	Ontonagon & Brule River.....				
55	Pontiac, Oxford & Northern.....	243			
56	Saginaw, Tuscola & Huron.....	163			33
57	Saginaw Valley & St. Louis.....	594		2	539
58	Saginaw & Grand Rapids.....				
59	Toledo, Ann Arbor & North Michigan.....	5,384	8,055	4,022	17,805
60	Toledo, Saginaw & Muskegon.....	71		507	273



## TUBULAR STATEMENT.

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## TONNAGE AND COMMODITIES MOVED.—CONTINUED.

Ores and Minerals, Tons. 9.30 Per Cent.	Stone, Brick, Sand, Etc., Tons. 4.62 Per Cent.	Manufactures, Tons. 3.45 Per Cent.	Merchandise and Articles not Included in Other Classes, Tons. 12.30 Per Cent.	Total Tonnage 1889.	Total Tonnage Previous Year.	Freight Forwarded from Michigan Stations, Tons.	Line No.
		9	489	5,822		5,822	1
					50,702		2
4,490	11,167	45,787	88,488	814,639	863,167	225,256	3
	95,067	149,086	263,547	1,741,196	1,486,908	808,588	4
3,786,126	467,077	298,697	1,528,605	11,890,177	11,107,068	3,342,135	5
							6
	27,996	21,862	81,814	888,892	986,270	810,078	7
170	91,864	19,801	48,171	582,717	591,750	83,920	8
	2,441	65	5,815	108,683		14,161	9
43	22,947	29,606	60,319	874,827	336,831	101,584	10
	437	890	11,376	871,768	493,547	871,768	11
41	28,662	21,479	120,480	567,875	577,671	493,263	12
							13
	7,904	12,208	39,861	496,624	453,855	496,624	14
							15
1,520,866	21,381	18,880	81,349	2,065,457	1,417,479	2,017,992	16
							17
							18
	14,068	35,786	171,460	1,596,888	1,574,002	1,584,110	19
					90,299		20
							21
							22
							23
88,782	240,914	127,753	104,443	1,786,374	1,965,157	1,294,801	24
427,965		4,252	11,274	616,493	516,877	616,493	25
984,474	952,040	361,434	1,584,314	10,020,599	9,069,857	993,600	26
							27
							28
							29
							30
							31
							32
							33
			50	117,040			34
			1,965	139,080	108,450	117,040	35
	10		500	70,600	63,907	139,080	36
	5,651	10,090	68,068	196,802	246,414	70,600	37
13,465	213,551	518,704	769,162	6,299,948	6,231,421	146,291	38
						2,966,969	39
							40
							41
							42
							43
							44
							45
							46
							47
							48
1,668,688	65,488	76,162	126,327	2,845,535	2,120,896	1,482,367	49
177,261	29,187	34,954	59,721	699,859	542,787	194,308	50
11,062		4,491	18,018	115,520	93,759	115,520	51
63,272	8,276	1,122	58,619	847,865	315,442	490,998	52
							53
							54
	84	228	8,868	55,412	61,489	55,412	55
	37,250	267	4,069	85,990	66,984	85,990	56
	766	1,208	7,397	57,715	62,166	57,715	57
							58
1,200	12,922	14,890	111,331	868,776	652,989	419,061	59
47	1,397	2,101	9,597	78,152	22,467	78,152	60

## MICHIGAN RAILROAD RETURNS.

## 12 A.—TONNAGE AND COMMODITIES MOVED.—CONTINUED.

Line No.	Railroads.	Petroleum and Charcoal, Tons, 1.48 Per Cent.	Railroad Balls, Tons, 0.49 Per Cent.	Pig and Bloom Iron, Tons, 1.30 Per Cent.	Other Iron and Castings, Tons, 1.94 Per Cent.
61	Toledo & South Haven.....	124			60
62	Traverse City.....				
63	Wabash.....	32,308	15,953	23,844	5,735
64	Wisconsin Central.....	27,544	20,672	10,336	55,954
65	Detroit Union Railroad Depot & Station Co.				
	Total for commercial roads.....	791,896	260,192	693,118	1,083,772
	ORE AND FOREST ROADS.				
1	Bear Lake & Eastern.....				
2	Buckley & Douglass.....				
3	Crawford & Manistee River.....				
4	Grass Lake & Manistee River.....				
5	Hecla & Torch Lake.....				1,000
6	Hobart & Manistee River.....				
7	Lake County.....				
8	Manistee & Luther.....				
9	Colfax & Big Rapids.....				
10	Mecosta.....				
	Total for ore and forest roads.....				1,000
	Total for all roads.....	791,896	260,192	693,118	1,084,772

## 13.—EQUIPMENT.

Line No.	Railroads.	Estimated Value.	Locomotives all classes, Number.	Passenger Cars all classes, Number.	Baggage, Mail, and Express Cars, Number.
1	Battle Creek & Sturgis.....	\$8,600	1	1	1
2	Bay City & Battle Creek.....				
3	Chicago, Detroit & C. G. T. Junction.....	1,268,750	181	30	17
4	Chicago & Grand Trunk.....	20,350	3	2	
5	Chicago, Kalamazoo & Saginaw.....	11,775,620	786	355	117
6	Chicago & Northwestern.....				
7	Chicago & West Michigan.....	629,500	49	39	23
8	Cincinnati, Jackson & Mackinaw.....				
9	Cin., Jack. & Mack., W. H. Brown, Receiver.....	294,525	25	20	3
10	Cincinnati, Wabash & Michigan.....	483,050	23	16	8
11	Detroit, Bay City & Alpena.....	320,950	20	5	2
12	Detroit, Grand Haven & Milwaukee.....	535,075	41	25	20
13	Detroit, Lansing & Northern.....	739,675	41	39	17
14	Grand Rapids, Lansing & Detroit.....				
15	Saginaw & Western.....				
16	Duluth, South Shore & Atlantic.....	2,494,948	113	45	13
17	Marquette, Houghton & Ontonagon.....				
18	Marquette & Western.....				
19	Flint & Pere Marquette.....	1,207,644	108	96	22
20	Manistee.....				
21	Port Huron & Northwestern.....				
22	Saginaw & Clare County.....				
23	Saginaw & Mt. Pleasant.....				
24	Frankfort & Southeastern.....				
25	Grand Rapids & Indiana.....	1,328,100	66	62	24
26	Hancock & Calumet.....	88,123	6	4	1

a. Equipment supplied by Grand Trunk of Canada.

**TABULAR STATEMENT.**

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**TONNAGE AND COMMODITIES MOVED.—CONTINUED.**

Ores and Minerals, Tons. 12.05 Per Cent.	Stone, Brick, Sand, Etc. Tons. 3.75 Per Cent.	Manufactures, Tons. 4.24 Per Cent.	Merchandise and Articles not Included in Other Classes, Tons. 22.00 Per Cent.	Total Tonnage, 1889.	Total Tonnage Previous Years.	Freight Forwarded from Michigan Stations, Tons.	Line No.
	43		1,664	11,673	10,522	11,673	61
3,589	69,628	41,797	690,148	3,596,042	2,799,753		62
801,787	36,362		482,945	2,142,503		188,122	63
							64
							65
9,468,238	2,464,540	1,839,140	6,564,542	52,107,288	44,129,651	19,803,778	
					45,910		1
				60,752	34,235	60,752	2
				46,230	33,700	46,230	3
845,000	3,000		3,000	915,900	869,500	915,900	4
							5
				103,300	118,740	103,300	6
				80,244	78,773	80,244	7
			1,115	96,624		96,624	8
					44,346		9
					72,268		10
845,000	3,000		4,115	1,309,050	1,297,522	1,308,048	
10,308,238	2,467,540	1,839,140	6,568,657	53,410,338	45,427,178	21,106,826	

**EQUIPMENT.—CONTINUED.**

Box Freight Cars.	Stock Cars.	Platform and Coal Cars.	Ore Cars.	Conductors' Way Cars.	All Other Kind of Cars.	Total Cars.	Locomotives Equipped with train brake.	Cars Equipped with Power Brakes.		Line No.
								Passenger.	Freight.	
Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number.	
						2	1	2		1
148	15	145		68	10	428	110	47		2
14,568	1,361	4,147	4,346	451	268	26,130	616	584	347	3
824	5	1,005		21	217	2,133	45	61		4
598	19	433		8		1,066	5	23		5
435	18	208		11	3	744	23	24		6
88		610		5	1	661	20	7		7
362	44	199		21	29	700	14	45		8
410	42	589		27	10	1,084	25	56		9
										10
810		770	4,046	52	183	5,919	75	58		11
										12
1,593	29	1,330		39	254	3,363	42	117		13
										14
										15
1,337	50	1,558		46	16	3,143		86	4	16
15		78	75		4	172	1	4		17

## 13.—EQUIPMENT.—CONTINUED.

Line No.	Railroads.	Estimated Value.	Locomotives all classes.	Passenger Cars all classes.	Baggage, Mail, and Express Cars.
			Number.	Number.	Number.
27	Lake Shore & Michigan Southern System.....	\$7,270,846	532	208	97
28	Detroit, Hillsdale & Southwestern.....				
29	Detroit, Monroe & Toledo.....				
30	Fort Wayne & Jackson.....				
31	Kalamazoo, Allegan & Grand Rapids.....				
32	Kalamazoo & White Pigeon.....				
33	Northern Central Michigan.....				
34	Lowell & Hastings.....	8,000	2		
35	Manistee & Northeastern.....	56,630	3	1	1
36	Manistique.....	35,569	2		
37	Mason & Oceana.....	46,622	4	1	1
38	Michigan Air Line Railway.....	26,400	2	1	1
39	Michigan Central System.....	7,399,350	419	209	79
40	Canada Southern Bridge.....				
41	Detroit & Bay City.....				
42	Grand River Valley.....				
43	Jackson, Lansing & Saginaw.....				
44	Kalamazoo & South Haven.....				
45	Michigan Air Line Railroad.....				
46	Michigan Midland & Canada.....				
47	Saginaw Bay & Northwestern.....				
48	Toledo, Canada Southern & Detroit.....				
49	Milwaukee, Lake Shore & Western.....	2,676,800	97	47	16
50	Milwaukee & Northern.....	656,300	37	25	11
51	Mineral Range.....	83,987	6	5	2
52	Minneapolis, St. Paul & Sault Ste. Marie.....	2,201,200	62	41	11
53	Muskegon, Grand Rapids & Indiana.....	b			
54	Ontonagon & Brule River.....		1	1	
55	Pontiac, Oxford & Northern.....	110,500	5	7	1
56	Saginaw, Tuscola & Huron.....	105,300	8	8	4
57	Saginaw Valley & St. Louis.....	36,500	3	2	1
58	Saginaw & Grand Rapids.....				
59	Toledo, Ann Arbor & North Michigan.....	617,200	36	13	9
60	Toledo, Saginaw & Muskegon.....	98,600	6	2	4
61	Toledo & South Haven.....	24,490	3	4	
62	Traverse City.....	b			
63	Wabash.....	5,696,375	404	167	109
64	Wisconsin Central.....		40	22	9
65	Detroit Union Railroad Depot & Station Co.....				
	Total for commercial roads.....	\$56,987,399	3,080	1,508	623
	ORE AND FOREST ROADS.				
1	Bear Lake & Eastern.....	30,215	3	1	
2	Buckley & Douglas.....	c			
3	Crawford & Manistee River.....	9,150	1		
4	Grass Lake & Manistee River.....	8,000	1		
5	Hecia & Torch Lake.....	162,200	9	1	
6	Hobart & Manistee River.....	20,400	2		
7	Lake County.....	16,000	3		
8	Manistee & Luther.....		6	1	
9	North Branch & Sauble River.....	14,000	2		
	Total for ore and forest roads.....	\$259,965	27	3	
	Total for all roads.....	\$57,197,364	3,107	1,508	623

b Equipped and operated by the G. R. &amp; I.

c Absorbed by the Manistee &amp; Northeastern.

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EQUIPMENT.—CONTINUED.

Box Freight Cars.	Stock Cars.	Platform and Coal Cars.	Ore Cars.	Conduc- tors' Way Cars.	All Other Kinds of Cars.	Total Cars.	Locomo- tives Equipped with train brake.	Cars Equipped with Power Brakes.		Line No.
								Passenger. Number.	Freight. Number.	
11,908	1,467	5,331		259	224	19,494	511	305		27
										28
										29
										30
										31
										32
										33
		5				5	1			34
5		100		1	7	115	3	2	2	35
		57		1		58				36
2		144			11	159	2			37
18	4					24	1	2		38
7,401	1,361	3,483		266	150	12,949	112	209		39
										40
										41
										42
										43
										44
										45
										46
										47
										48
1,990	55	1,378	850	43	26	4,405	77	61	306	49
708	10	207	150	11	150	1,272	36	96		50
32		58		1	4	108	4	5		51
2,686	26	776	1	35	47	3,573	62	52		52
										53
2		15			1	19				54
46	4	61		1	1	121	3	8		55
97	9	129		2	24	273	8	8	83	56
10		40		2		55	2	3		57
										58
681		375		13	26	1,117	12	12		59
80		52		2		140	2	6		60
12		16			13	45	2	4	1	61
										62
8,353	1,612	3,329		204	206	13,979	404	276		63
562	99	197	789	25	15	1,708	40	31		64
										65
55,785	6,729	26,765	10,257	1,611	1,912	105,185	2,311	2,087	743	
		53			14	68	1			1
										2
		34			2	36				3
		80			1	31				4
4		63	248	8	4	323				5
		42				42				6
		40				40				7
2		15		3	236	257				8
		50				50				9
6		827	248	6	257	847	1			
55,791	6,729	27,092	10,506	1,617	2,169	106,032	2,312	2,087	743	

## MICHIGAN RAILROAD RETURNS.

## 14.—STATIONS AND EMPLOYEES.

Line No.	Railroads.	Stations.		Employees.	
		Total.	In Michigan.	Total.	In Michigan.
1	Battle Creek & Sturgis.....	10	10	42	42
2	Bay City & Battle Creek.....				
3	Chicago, Detroit & C. G. T. Junction.....	12	12	302	302
4	Chicago & Grand Trunk.....	84	45	2,721	1,818
5	Chicago, Kalamazoo & Saginaw.....	12	12	52	52
6	Chicago & Northwestern.....	686	37	16,758	1,640
7	Chicago & West Michigan.....	109	108	1,229	1,188
8	Cincinnati, Jackson & Mackinaw.....	83	26	629	233
9	Cincinnati, Saginaw & Mackinaw, W. H. Brown, Receiver.....				
10	Cincinnati, Wabash & Michigan.....	40	8	410	41
11	Detroit, Bay City & Alpena.....	31	31	350	350
12	Detroit, Grand Haven & Milwaukee.....	40	40	1,080	1,080
13	Detroit, Lansing & Northern.....	80	80	1,076	1,074
14	Grand Rapids, Lansing & Detroit.....				
15	Saginaw & Western.....				
16	Duluth, South Shore & Atlantic.....	86	72	1,389	1,331
17	Marquette, Houghton & Ontonagon.....				
18	Marquette & Western.....				
19	Flint & Pere Marquette.....	140	140	2,263	2,203
20	Manistee.....				
21	Port Huron & Northwestern.....				
22	Saginaw & Clare County.....				
23	Saginaw & Mt. Pleasant.....				
24	Frankfort & Southeastern.....				
25	Grand Rapids & Indiana.....	163	143	2,193	1,898
26	Hancock & Calumet.....	6	6	80	80
27	Lake Shore & Michigan Southern System.....	288	87	11,974	1,879
28	Detroit, Hilldale & Southwestern.....				
29	Detroit, Monroe & Toledo.....				
30	Fort Wayne & Jackson.....				
31	Kalamazoo, Allegan & Grand Rapids.....				
32	Kalamazoo & White Pigeon.....				
33	Northern Central Michigan.....				
34	Lowell & Hastings.....				
35	Manistee & Northeastern.....	15	15	150	150
36	Manistique.....	8	8	46	46
37	Mason & Oceana.....	6	6	40	40
38	Michigan Air Line Railway.....	20	20	176	176
39	Michigan Central System.....	420	280	8,887	5,910
40	Canada Southern Bridge.....				
41	Detroit & Bay City.....				
42	Grand River Valley.....				
43	Jackson, Lansing & Saginaw.....				
44	Kalamazoo & South Haven.....				
45	Michigan Air Line Railroad.....				
46	Michigan Midland & Canada.....				
47	Saginaw Bay & Northwestern.....				
48	Toledo, Canada Southern & Detroit.....				
49	Milwaukee, Lake Shore & Western.....	83	8	1,939	280
50	Milwaukee & Northern.....	65	10	928	87
51	Mineral Range.....	4	4	70	70
52	Minneapolis, St. Paul & Sault Ste. Marie.....	91	14	975	195
53	Muskegon, Grand Rapids & Indiana.....				
54	Ontonagon & Brule River.....	6	6	35	35
55	Pontiac, Oxford & Northern.....	22	22	109	109
56	Saginaw, Tuscola & Huron.....	18	18	81	81
57	Saginaw Valley & St. Louis.....	17	17	63	63
58	Saginaw & Grand Rapids.....				
59	Toledo, Ann Arbor & North Michigan.....	77	74	894	746
60	Toledo, Saginaw & Muskegon.....	25	25	101	101

\* Included with Grand Rapids & Indiana.

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Employee Classified.									Line No.
Baggage-men. Number.	Brake-men. Number.	Conduc-tors. Number.	Engineers. Number.	Firemen. Number.	Laborers. Number.	Shopmen. Number.	Yardmen. Number.	Others Number.	
2	2	2	2	2	19	2		11	1
5	16	11	21	19	81	1	25	123	2
31	216	105	148	186	774	545	92	674	3
	2	2	2	2	24		2	18	4
290	1,129	606	928	1,005	5,140	3,195	712	3,753	5
34	77	42	56	59	384	238	35	304	6
8	35	22	31	33	277	81	14	128	7
5	18	12	19	19	124	95	6	112	8
2	50	25	25	25	183	10	1	29	9
23	47	30	48	48	358	64	34	429	10
27	68	38	43	44	394	204	17	241	11
14	79	40	55	56	596	207	70	272	12
	243	82	99	105	708	313	115	608	13
20	127	72	94	99	520	319	111	581	14
2	10	3	5	5	21	6	5	23	15
160	665	320	356	583	1,477	1,020	1,018	6,375	16
1	3	3	3	3	182	3	2		17
	3	3	3	3	29			5	18
	7	1	5	5	16	4	2		19
1	14	9	4	4	92	1	1	50	20
98	532	290	469	538	2,075	987	678	3,366	21
15	140	76	104	112	933	324	59	177	22
10	58	30	43	43	247	96	34	368	23
4	6	2	5	5	16	10	8	14	24
3	20	10	10	10	80	5	5	52	25
1	1	1	1	1	23			7	26
2	4	3	3	3	51	16		27	27
6		3	5	5	33	4		35	28
2	4	3	3	4	28	4		15	29
7	92	39	47	46	260	131	40	232	30
2	6	4	5	6	42	2	1	33	31

## MICHIGAN RAILROAD RETURNS.

## 14.—STATIONS AND EMPLOYÉS.—CONTINUED.

Line No.	Railroads.	Stations.		Employée.	
		Total.	In Michigan.	Total.	In Michigan.
61	Toledo & South Haven.....	6	6	27	27
62	Traverse City.....	a			
63	Wabash.....	125	17	243	243
64	Wisconsin Central.....	175	3	2,860	116
65	Detroit Union Railroad Depot & Station Company.....				
	Total for commercial roads.....	3,053	1,415	60,152	23,726
	ORE AND FOREST ROADS.				
1	Bear Lake & Eastern.....	5	5	11	11
2	Buckley & Douglas.....				
3	Crawford & Manistee River.....	2	2	31	31
4	Grass Lake & Manistee River.....	2	2	22	22
5	Hecla & Torch Lake.....	2	2	186	186
6	Hobart & Manistee River.....	2	2	40	40
7	Lake County.....	2	2	23	23
8	Manistee & Luther.....	3	3	104	104
9	North Branch & Sauble River.....	2	2	12	12
	Total for ore and forest roads.....	20	20	379	379
	Total for all roads.....	3,053	1,435	60,531	24,105

a. Included with the Grand Rapids &amp; Indiana.

## 15.—PERMANENT WAY.

Line No.	Railroads.	Bridge Structures.							
		Wooden.		Stone or Iron.		Combination.		Trestles.	
		No.	Length, Feet.	No.	Length, Feet.	No.	Length, Feet.	No.	Length, Feet.
1	Battle Creek & Sturgis.....								
2	Bay City & Battle Creek.....								
3	Chicago, Detroit & C. G. T. Junction.....			6	792				
4	Chicago & Grand Trunk.....			15	1,568			58	3,519
5	Chicago, Kalamazoo & Saginaw.....							88	1,430
6	Chicago & Northwestern.....	29	2,543	7	730	3	494	547	25,317
7	Chicago & West Michigan.....	5	1,505	1	1,026	2	675	202	25,584
8	Cincinnati, Jackson & Mackinaw.....								
9	Cin., Jackson & Mack.—W. H. Brown, Rec.....	1	144					89	21,928
10	Cincinnati, Wabash & Michigan.....	1	60					2	535
11	Detroit, Bay City & Alpena.....	13	1,394	2	496	2	1,437	9	2,158
12	Detroit, Grand Haven & Milwaukee.....			21	2,777			42	3,045
13	Detroit, Lansing & Northern.....	8	595	24	2,653			58	4,977
14	Grand Rapids, Lansing & Detroit.....								
15	Saginaw & Western.....								
16	Duluth, South Shore & Atlantic.....	153	14,996	7	480			34	7,963
17	Marquette, Houghton & Ontonagon.....								
18	Marquette & Western.....								
19	Flint & Pere Marquette.....	22	1,979	16	1,907	9	989	123	17,530
20	Manistee.....								
21	Port Huron & Northwestern.....								
22	Saginaw & Clare County.....								
23	Saginaw & Mt. Pleasant.....								
24	Frankfort & Southeastern.....								
25	Grand Rapids & Indiana.....	10	1,139	9	485	7	1,091	168	12,257
26	Hancock & Calumet.....			3	560			17	4,450



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Employee Classified.									Line No.
Baggage-men. Number.	Brake-men. Number.	Conduc-tors. Number.	Engineers. Number.	Firemen. Number.	Laborers. Number.	Shopmen. Number.	Yardmen. Number.	Others. Number.	
1	1	1	2	2	18	1		6	61
3	35	18			104			54	62
	187	85	143	140	475	479	29 148	1,200	63
									64
									65
773	3,897	1,938	2,791	3,169	15,724	8,317	3,261	19,457	
			2	2	4			3	1
	1		1	1	26			2	2
	1		1	1				19	3
	12	4	6	6	82	10	10	6	4
									5
	6		2	2				30	6
	6		3	3	9	1		1	7
	12	3	7	7	50	5	3	16	8
	2	2	2	4				2	9
	41	9	24	26	171	16	13	79	
778	3,938	1,992	2,815	3,195	15,806	8,333	3,274	19,536	

[illegible]

## 15.—PERMANENT WAY.—CONTINUED.

Line No.	Railroads.	Bridge Structures.							
		Wooden.		Stone or Iron.		Combination.		Trestles.	
		No.	Length, Feet.	No.	Length, Feet.	No.	Length, Feet.	No.	Length, Feet.
27	Lake Shore & Michigan Southern System.....	81	4,225	9	995	1	305	85	12,255
28	Detroit, Hillsdale & Southwestern.....								
29	Detroit, Monroe & Toledo.....								
30	Fort Wayne & Jackson.....								
31	Kalamazoo, Allegan & Grand Rapids.....								
32	Kalamazoo & White Pigeon.....								
33	Northern Central Michigan.....								
34	Lowell & Hastings.....								
35	Manistee & Northeastern.....	3	152					2	490
36	Manistique.....	2	240						
37	Mason & Oceana.....	3	450						
38	Michigan Air Line Railway.....	3	239					78	6,566
39	Michigan Central System.....	205	14,615	39	4,967	5	3,358	77	7,797
40	Canada Southern Bridge.....								
41	Detroit & Bay City.....								
42	Grand River Valley.....								
43	Jackson, Lansing & Saginaw.....								
44	Kalamazoo & South Haven.....								
45	Michigan Air Line R. R.....								
46	Michigan Midland & Canada.....								
47	Saginaw Bay & Northwestern.....								
48	Toledo, Canada Southern & Detroit.....								
49	Milwaukee, Lake Shore & Western.....	7	439					26	3,052
50	Milwaukee & Northern.....	4	290	1	117			82	6,738
51	Mineral Range.....							6	645
52	Minneapolis, St. Paul & Sault Ste. Marie.....	18	1,982					121	13,617
53	Muskegon, Grand Rapids & Indiana.....	a							
54	Ontonagon & Brule River.....							25	5,068
55	Pontiac, Oxford & Northern.....	3	210					18	1,510
56	Saginaw, Tuscola & Huron.....	11	1,297						
57	Saginaw Valley & St Louis.....	4	153					4	347
58	Saginaw & Grand Rapids.....								
59	Toledo, Ann Arbor & North Michigan.....	2	96			2	220	192	10,665
60	Toledo, Saginaw & Muskegon.....	4	575					70	6,387
61	Toledo & South Haven.....	11	1,140						
62	Traverse City.....	a							
63	Wabash.....					2	359	89	8,008
64	Wisconsin Central.....	4	358					6	3,099
65	Detroit Union R. R. Depot & Station Co.....								
	Total commercial roads.....	552	50,556	161	19,393	83	8,878	2,273	217,800
	ORE AND FOREST ROADS.								
1	Bear Lake & Eastern.....	3	96					2	700
2	Buckley & Douglas.....								
3	Crawford & Manistee River.....								
4	Grass Lake & Manistee River.....								
5	Hecla & Torch Lake.....							5	1,500
6	Hobart & Manistee River.....							2	685
7	Lake County.....	2	650						
8	Manistee & Luther.....	3	150					1	60
9	North Branch & Sauble River.....								
	Total ore and forest roads.....	8	896					10	2,945
	Total for all roads.....	560	51,452	161	19,393	83	8,878	2,283	220,745

a Reported with Grand Rapids &amp; Indiana.

# TABULAR STATEMENT.

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## PERMANENT WAY.—CONTINUED.

Bridge Structures.				Railroad Crossings.			Highway Crossings.						Line No.
Draw Bridges		Total.		At Grade.	Over or Under.	Total.	At Grade.	With Gates or Signal.	Over or Under.	18 Feet above track.	Less than 18 feet above track.	Total.	
No.	Length, Feet.	No.	Length, Feet.	No.	No.	No.	No.	No.	No.	No.	No.	No.	
2	339	128	18,019	31	2	33	827	87	12	7	-----	889	27
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	28
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	29
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	30
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	31
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	32
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	33
1	160	6	792	-----	-----	-----	-----	-----	-----	-----	-----	-----	34
-----	-----	2	240	1	-----	1	8	-----	-----	-----	-----	8	35
-----	-----	3	450	-----	-----	-----	11	-----	-----	-----	-----	11	36
-----	-----	81	6,905	6	-----	6	181	1	2	2	-----	133	37
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	38
10	1,867	336	32,104	43	6	54	1,290	161	54	27	9	1,344	39
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	40
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	41
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	42
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	43
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	44
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	45
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	46
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	47
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	48
-----	-----	33	3,491	1	3	4	17	2	-----	-----	-----	17	49
-----	-----	87	7,180	7	1	8	20	-----	1	-----	-----	21	50
1	180	7	825	1	-----	1	18	2	2	1	-----	20	51
-----	-----	134	15,549	7	1	8	47	2	2	2	-----	49	52
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	53
-----	-----	25	5,068	-----	-----	-----	8	-----	-----	-----	-----	8	54
-----	-----	21	1,730	3	1	4	104	-----	1	1	-----	105	55
1	43	12	1,340	2	-----	2	89	4	-----	-----	-----	89	56
-----	-----	8	500	1	-----	1	59	-----	-----	-----	-----	59	57
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	58
-----	-----	196	10,981	12	1	13	232	5	4	1	2	286	59
-----	-----	74	7,212	6	-----	6	125	-----	3	-----	-----	128	60
-----	-----	11	1,140	1	-----	1	21	-----	-----	-----	-----	21	61
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	62
-----	-----	91	8,367	7	-----	7	116	6	-----	-----	-----	116	63
-----	-----	10	3,427	4	-----	4	5	1	-----	-----	-----	5	64
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	65
27	3,661	3,046	300,288	294	31	325	6,599	392	186	84	19	6,785	-----
-----	-----	5	796	-----	-----	-----	13	-----	13	-----	-----	26	1
-----	-----	-----	-----	-----	-----	-----	3	-----	3	-----	-----	6	2
-----	-----	5	1,500	2	-----	2	4	2	-----	-----	-----	4	3
-----	-----	-----	-----	-----	-----	-----	7	-----	-----	-----	-----	7	4
-----	-----	2	685	-----	-----	-----	1	-----	-----	-----	-----	1	5
-----	-----	3	650	1	-----	1	-----	-----	-----	-----	-----	-----	6
-----	-----	4	210	2	-----	2	-----	-----	-----	-----	-----	-----	7
-----	-----	-----	-----	1	-----	1	3	-----	-----	-----	-----	3	8
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	9
-----	-----	18	3,841	6	-----	6	31	2	16	-----	-----	47	-----
27	3,661	3,064	304,129	300	31	331	6,630	394	202	84	19	6,832	-----

## MICHIGAN RAILROAD RETURNS.

15 A.—PERMANENT WAY.—CONTINUED.

Line No.	Railroads.	Fencing.	
		Completed Miles, Number.	Required Miles, Number.
1	Battle Creek & Sturgis.....		
2	Bay City & Battle Creek.....		
3	Chicago, Detroit & C. G. T. Junction.....	122.74	
4	Chicago & Grand Trunk.....	456.00	
5	Chicago, Kalamazoo & Saginaw.....	87.00	
6	Chicago & Northwestern.....	567.50	173.60
7	Chicago & West Michigan.....	782.00	44.00
8	Cincinnati, Jackson & Mackinaw.....		
9	Cincinnati, Jackson & Mackinaw—W. H. Brown, Receiver.....	295.00	11.11
10	Cincinnati, Wabash & Michigan.....	66.00	
11	Detroit, Bay City & Alpena.....	30.00	
12	Detroit, Grand Haven & Milwaukee.....	865.00	
13	Detroit, Lansing & Northern.....	646.00	
14	Grand Rapids, Lansing & Detroit.....		
15	Saginaw & Western.....		
16	Duluth, South Shore & Atlantic.....	75.00	759.00
17	Marquette, Houghton & Ontonagon.....		
18	Marquette & Western.....		
19	Flint & Pere Marquette.....	624.94	112.50
20	Manistee.....		
21	Port Huron & Northwestern.....		
22	Saginaw & Clare County.....		
23	Saginaw & Mt. Pleasant.....		
24	Frankfort & Southeastern.....		
25	Grand Rapids & Indiana.....	333.17	85.00
26	Hancock & Calumet.....	6.00	34.00
27	Lake Shore & Michigan Southern System.....	1,141.56	
28	Detroit, Hillsdale & Southwestern.....		
29	Detroit, Monroe & Toledo.....		
30	Fort Wayne & Jackson.....		
31	Kalamazoo, Allegan & Grand Rapids.....		
32	Kalamazoo & White Pigeon.....		
33	Northern Central Michigan.....		
34	Lowell & Hastings.....	14.50	9.50
35	Manistee & Northeastern.....	15.00	57.00
36	Manistique.....		
37	Mason & Oceana.....	16.00	11.00
38	Michigan Air Line railway.....	214.00	1.00
39	Michigan Central System.....	1,766.08	145.00
40	Canada Southern Bridge.....		
41	Detroit & Bay City.....		
42	Grand River Valley.....		
43	Jackson, Lansing & Saginaw.....		
44	Kalamazoo & South Haven.....		
45	Michigan Air Line railroad.....		
46	Michigan Midland & Canada.....		
47	Saginaw Bay & Northwestern.....		
48	Toledo, Canada Southern & Detroit.....		
49	Milwaukee, Lake Shore & Western.....	22.98	152.67
50	Milwaukee & Northern.....	9.50	51.25
51	Mineral Range.....	3.00	31.00
52	Minneapolis, St. Paul & Sault Ste. Marie.....	24.60	360.00
53	Muskegon, Grand Rapids & Indiana.....		
54	Ontonagon & Brule River.....	10.00	82.00
55	Pontiac, Oxford & Northern.....	199.80	10.20
56	Saginaw, Tuscola & Huron.....	138.14	
57	Saginaw Valley & St. Louis.....	78.14	
58	Saginaw & Grand Rapids.....		
59	Toledo, Ann Arbor & North Michigan.....	426.00	112.00
60	Toledo, Saginaw & Muskegon.....	182.38	9.61

\* Reported with Grand Rapids &amp; Indiana Railroad.

# TABULAR STATEMENT.

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## PERMANENT WAY.—CONTINUED.

Maintenance.				Renewals.					Line No.
Trestles replaced with earth work. Linear feet.	Track sections in Mich. Number.	Average length of sections. Miles.	Average No. of Men to each section.	New rails laid in Mich.		Ties.			
				Tons.	Miles of Track.	Entire Line. No.	In Michigan. No.	Average per mile in Mich. No.	
									1
									2
	18	4.50	4			28,532	28,532	490	3
884	45	5.00	5	1,688	16.08	178,962	107,298	479	4
	8	6.00	3						5
	63	6.00	4.8	12,551	115.18	1,183,159	56,610	278	6
2,965	78	5.50	3	2,000	212.00	202,107	188,500	495	7
									8
465	22	7.05	4			42,899	28,386	213	9
275	6	6.00	3			36,554	7,255	217	10
30	27	8.00	4			20,997	20,997		11
156	37	5.10	4	210	2.00	111,602	111,602	590	12
									13
448	66	5.50	3	857	9.30	123,586	123,586	385	14
									15
	77	6.00	5	760	8.25	75,000	73,000	178	16
									17
									18
	118	11.25	4	13,480	130.32	560,776	560,776	897	19
									20
									21
									22
									23
243	99	4.32	4	1,807	20.00	233,750	213,573	495	24
	5	5.00	4						25
51.50	100	5.67	4	15,860	148.91	711,678	166,966	505	26
									27
									28
									29
									30
									31
									32
									33
	2	6.00	3						34
	5	7.00	6						35
	4	8.00	4	140	16.00				36
	4	7.00	4			1,000	1,000	37	37
795	14	7.00	3			37,991	37,991	361	38
									39
517	245	4.30	4	4,355	34.69	523,617	361,197	342	40
									41
									42
									43
									44
									45
									46
									47
									48
	14	6.00	3	6,482	57.93	324,788	22,560	509	49
	3	7.00	5			80,700	16,620	266	50
	3	6.00	4			6,050	6,050	355	51
	27	7.00	3			17,066	3,072	35	52
									53
	6	7.66	4						54
									55
	16	6.26	3			63,297	63,297	632	56
	11	6.00	3	69	1.27	21,572	21,572	324	57
	7	5.83	3			14,866	14,866	381	58
									59
884	41	7.00	4			41,178	33,540	127	60
	10	9.80	4.5						61

## MICHIGAN RAILROAD RETURNS.

## 15 A.—PERMANENT WAY.—CONTINUED.

Line No.	Railroads.	Fencing.	
		Completed Miles. Number.	Required Miles. Number.
61	Toledo & South Haven .....	47.00	25.00
62	Traverse City .....		
63	Wabash .....	158.20	1.50
64	Wisconsin Central .....	3.88	3.17
65	Detroit Union Railroad Depot & Station Co. ....		
	Total for commercial roads .....	8,946.53	2,281.11
	ORE AND FOREST ROADS.		
1	Bear Lake & Eastern .....	9.00	27.00
2	Buckley & Douglas .....		
3	Crawford & Manistee River .....		
4	Grass Lake & Manistee River .....		
5	Hecla & Torch Lake .....	15.00	
6	Hobart & Manistee River .....		
7	Lake County .....		
8	Manistee & Luther .....		
9	North Branch & Sauble River .....		
	Total for ore and forest roads .....	24.00	27.00
	Total for all roads .....	8,970.53	2,308.11

## 15 B.—PERMANENT WAY.—CONTINUED.

Line No.	Railroads.	Renewal of Timber Culverts.			
		With Stone or Iron Pipe. Number.	With Sewer Pipe. Number.	With Timber. Number.	Total Number Renewed.
1	Battle Creek & Sturgis .....				
2	Bay City & Battle Creek .....				
3	Chicago, Detroit & C. G. T. Junction .....				
4	Chicago & Grand Trunk .....	32		10	42
5	Chicago, Kalamazoo & Saginaw .....				
6	Chicago & Northwestern .....				
7	Chicago & West Michigan .....		7		7
8	Cincinnati, Jackson & Mackinaw .....				
9	Cin., Jack. & Mack., W. H. Brown, Receiver .....				
10	Cincinnati, Wabash & Michigan .....				
11	Detroit, Bay City & Alpena .....				
12	Detroit, Grand Haven & Milwaukee .....	13		11	24
13	Detroit, Lansing & Northern .....	2	29		31
14	Grand Rapids, Lansing & Detroit .....				
15	Saginaw & Western .....				
16	Duluth, South Shore & Atlantic .....				
17	Marquette, Houghton & Ontonagon .....				
18	Marquette & Western .....				
19	Flint & Pere Marquette .....				
20	Manistee .....				
21	Port Huron & Northwestern .....				
22	Saginaw & Clare County .....				
23	Saginaw & Mt. Pleasant .....				
24	Frankfort & Southeastern .....				
25	Grand Rapids & Indiana .....	8		7	15
26	Hancock & Calumet .....				

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Maintenance.				Renewals.					Line No.
Trestles replaced with earth work. Linear feet.	Track Sections in Michigan. Number.	Average length of sections. Miles.	Average No. of men to each section.	New rails laid in Mich.		Ties.			
				Tons.	Miles of Track.	Entire Line. No.	In Michigan. No.	Average per mile in Mich. No.	
	6	6.00	2			3,042	3,042	88	61
	12	6.66	5	259	2.57		30,906	888	62
	2	6.87	7	18	1.45	148,832	80,223	4,379	63
									64
6,118.50	1,196	5.58	4	59,981	775.35	4,792,495	2,368,086	859	65
	1	18.00	4						1
	1	10.00	6			2,000	2,000	200	2
	1	12.00	5						3
	8	2.00	6			2,000	2,000		4
	1	9.24	4						5
	1	11.00	6						6
	5	10.00	4			12,000	12,000	2,700	7
	1	10.00	4						8
	14	10.44	4.87			16,000	16,000	106	9
6,118.50	1,210	5.58	4.21	59,981	775.35	4,792,495	2,384,086	852	

[illegible]

## MICHIGAN RAILROAD RETURNS.

## 15 B.—PERMANENT WAY.—CONTINUED.

Line No.	Railroads.	Renewal of Timber Culverts.			
		With Stone or Iron Pipe. Number.	With Sewer Pipe. Number.	With Timber. Number.	Total Number Renewed.
27	Lake Shore & Michigan Southern System.....			51	51
28	Detroit, Hillsdale & Southwestern.....				
29	Detroit, Monroe & Toledo.....				
30	Fort Wayne & Jackson.....				
31	Kalamazoo, Allegan & Grand Rapids.....				
32	Kalamazoo & White Pigeon.....				
33	Northern Central Michigan.....				
34	Lowell & Hastings.....				
35	Manistee & Northeastern.....				
36	Manistique.....				
37	Mason & Oceana.....				
38	Michigan Air Line Railway.....	2			2
39	Michigan Central System.....	50	11	97	158
40	Canada Southern Bridge.....				
41	Detroit & Bay City.....				
42	Grand River Valley.....				
43	Jackson, Lansing & Saginaw.....				
44	Kalamazoo & South Haven.....				
45	Michigan Air Line Railroad.....				
46	Michigan Midland & Canada.....				
47	Saginaw Bay & Northwestern.....				
48	Toledo, Canada Southern & Detroit.....				
49	Milwaukee, Lake Shore & Western.....				
50	Milwaukee & Northern.....				
51	Mineral Range.....				
52	Minneapolis, St. Paul & Sault Ste. Marie.....				
53	Muskegon, Grand Rapids & Indiana.....	a			
54	Ontonagon & Brule River.....				
55	Pontiac, Oxford & Northern.....				
56	Saginaw, Tuscola & Huron.....				
57	Saginaw Valley & St. Louis.....		1		1
58	Saginaw & Grand Rapids.....				
59	Toledo, Ann Arbor & North Michigan.....			7	7
60	Toledo, Saginaw & Muskegon.....				
61	Toledo & South Haven.....				
62	Traverse City.....	a			
63	Wabash.....				
64	Wisconsin Central.....				
65	Detroit Union Railroad Depot & Station Co.....				
	Total for commercial roads.....	90	56	183	338
	ORE AND FOREST ROADS.				
1	Bear Lake & Eastern.....				
2	Buckley & Douglas.....				
3	Crawford & Manistee River.....				
4	Grass Lake & Manistee River.....				
5	Hecla & Torch Lake.....				
6	Hobart & Manistee River.....				
7	Lake County.....				
8	Manistee & Luther.....				
9	North Branch & Sauble River.....				
	Total for ore and forest roads.....				
	Total for all roads.....	99	56	183	338

a Included with G. R. &amp; I.



# TABULAR STATEMENT.

685

## PERMANENT WAY.—CONTINUED.

New Bridges.								Line No.
Wooden.		Iron or Stone.		Combination.		Total Number.	Total length linear feet.	
Number.	Length, linear feet.	Number.	Length, linear feet.	Number.	Length, linear feet.			
		1	380			1	380	27
								28
								29
								30
								31
								32
								33
3	520			1	180	3	520	34
						1	180	35
								36
								37
								38
4	649	2	88			6	735	39
								40
								41
								42
								43
								44
								45
								46
								47
								48
								49
								50
								51
								52
								53
								54
								55
								56
								57
4	316					4	316	58
								59
								60
								61
								62
								63
								64
								65
41	5,400	12	1,800	2	2,241	82	9,501	
								1
								2
								3
								4
								5
								6
								7
								8
								9
41	5,400	12	1,800	2	2,241	82	9,501	

## MICHIGAN RAILROAD RETURNS.

16.—TAXES PAYABLE JULY 1, 1900.

Line No.	Railroads.	Miles of Road Operated in Michigan.
1	Battle Creek & Sturgis	44.00
2	St. Louis, Sturgis & Battle Creek, Ackerman, Receiver	
3	Chicago, Detroit & C. G. T. Junction	59.37
4	Chicago & Grand Trunk	224.00
5	Chicago, Kalamazoo & Saginaw	35.66
6	Chicago & Northwestern	331.53
7	Chicago & West Michigan	373.94
8	Cincinnati, Jackson & Mackinaw	172.13
9	Cin., Jack. & Mack. W. H. Brown, Receiver	
10	Cincinnati, Wabash & Michigan	33.40
11	Detroit, Bay City & Alpena	209.22
12	Detroit, Grand Haven & Milwaukee	139.00
13	Detroit, Lansing & Northern	323.68
14	Grand Rapids, Lansing & Detroit	
15	Saginaw & Western	
16	Duluth, South Shore & Atlantic	314.29
17	Marquette, Houghton & Ontonagon	134.43
18	Marquette & Western	20.83
19	Flint & Pere Marquette	624.94
20	Manistee	
21	Port Huron & Northwestern	
22	Saginaw & Clare County	
23	Saginaw & Mt. Pleasant	
24	Frankfort & Southeastern	
25	Grand Rapids & Indiana	355.23
26	Hancock & Calumet	20.25
27	Lake Shore & Michigan Southern	187.80
27½	Detroit & Chicago	62.94
28	Detroit, Hillsdale & Southwestern	65.20
29	Detroit, Monroe & Toledo	54.67
30	Fort Wayne & Jackson	44.54
31	Kalamazoo, Allegan & Grand Rapids	58.42
32	Kalamazoo & White Pigeon	39.57
33	Northern Central Michigan	61.14
34	Lowell & Hastings	12.00
35	Manistee & Northeastern	39.90
36	Manistique	40.75
37	Mason & Oceana	27.00
38	Michigan Air Line Railway	105.60
39	Michigan Central	221.00
40	Canada Southern Bridge	3.66
41	Detroit & Bay City	151.43
42	Grand River Valley	83.79
43	Jackson, Lansing & Saginaw	295.10
44	Kalamazoo & South Haven	39.50
45	Michigan Air Line Railroad	109.10
46	Michigan Midland & Canada	14.68
47	Saginaw Bay & Northwestern	89.31
48	Toledo, Canada Southern & Detroit	47.27
49	Milwaukee, Lake Shore & Western	101.23
50	Milwaukee & Northern	60.75
51	Mineral Range	17.00
52	Minneapolis, St. Paul & Sault Ste. Marie	192.01
53	Muskegon, Grand Rapids & Indiana	36.85
54	Ontonagon & Brule River	46.10
55	Pontiac, Oxford & Northern	100.20
56	Saginaw, Tuscola & Huron	66.37
57	Saginaw Valley & St. Louis	35.50
58	Saginaw & Grand Rapids	
59	Toledo, Ann Arbor & North Michigan	243.00
59½	Toledo, Saginaw & Mackinaw	39.20
60	Toledo, Saginaw & Muskegon	96.00

a Special charter roads. Taxed on stock and debt.

TABULAR STATEMENT.

687.

TAXES PAYABLE JULY 1, 1890.—CONTINUED.

Gross Earnings as Reported for Michigan.	Gross Earnings per mile of road operated.	Per cent of Taxation on taxable income.	Total Taxes Assessed for Michigan.	Taxes per mile of road operated in Michigan.	Line No.
\$9,415 28	\$226 55	2	\$188 80	\$4 28	1
9,735 98	221 25	2	194 72	4 43	2
250,029 11	4,211 87	2.05	3,126 07	86 84	3
2,498,985 32	11,138 64	2.64	65,858 06	294 00	4
34,330 68	956 74	2	668 61	18 75	5
8,016,548 57	6,160 69	2.52	76,159 09	199 60	6
1,258,827 58	3,866 39	2	25,176 55	67 38	7
261,460 42	1,518 14	2	5,229 21	80 87	8
94,974 98	272 84	2	989 79	5 45	9
108,501 77	3,248 55	2	2,170 04	64 96	10
487,209 48	2,892 62	2	9,744 19	46 55	11
1,076,612 71	5,696 86	2.04	25,171 40	133 18	12
1,131,985 91	3,497 23	2	22,639 72	69 94	13
					14
					15
561,598 50	1,788 51	2	11,231 87	35 68	16
1,125,522 90	8,897 11	2.52	28,838 48	211 18	17
97,296 18	4,638 15	2.14	2,065 68	10 01	18
2,332,279 60	3,732 00	2	46,645 59	70 46	19
					20
					21
					22
					23
					24
1,998,279 38	5,614 87	2.28	45,588 18	114 19	25
134,657 44	6,613 82	2.89	3,225 32	156 41	26
3,664,001 89	19,700 54	1.86	46,743 60	249 57	27
35,757 60	598 45	2	715 15	11 86	27 1/2
83,445 41	591 46	2	768 91	11 79	28
494,667 54	899 40	2.55	12,653 23	231 44	29
95,964 09	2,130 31	2	1,917 28	43 04	30
146,777 00	2,580 66	2	2,985 52	50 25	31
99,990 88	2,702 45	2	1,999 82	54 68	32
96,143 51	1,034 40	2	1,922 97	31 45	33
3,596 14	298 84	2	71 72	5 96	34
46,664 32	1,169 54	2	933 29	23 91	35
44,685 99	1,098 59	2	598 72	21 98	36
89,599 90	1,466 66	2	792 00	29 35	37
152,640 45	1,445 45	2	3,062 80	28 91	38
4,329,566 91	19,862 29	3.10	184,088 80	606 71	39
1,234 98	808 74	2	24 70	6 75	40
769,678 27	5,097 20	2.21	17,033 55	112 49	41
304,549 98	3,744 64	4.90	14,984 00	178 22	42
1,586,627 22	5,206 90	2.28	84,294 32	116 22	43
51,672 06	1,041 80	2	1,063 44	26 16	44
306,492 38	2,802 68	2	6,109 35	56 00	45
9,614 20	654 28	2	196 28	13 89	46
182,627 66	1,480 19	2	2,632 55	29 70	47
543,784 66	11,566 82	2.66	14,421 24	30 51	48
544,128 94	5,372 51	2.25	12,272 67	121 17	49
233,575 42	3,963 85	2	4,667 51	76 68	50
106,775 06	6,437 35	2.88	2,618 25	153 70	51
1,689,380 84	2,064 65	2	8,110 73	42 24	52
137,543 57	4,263 75	2.06	3,252 31	88 26	53
5,780 43	124 30	2	114 61	2 49	54
102,088 27	1,020 68	2	2,041 87	20 87	55
106,964 22	1,607 09	2	2,139 68	32 14	56
96,813 70	2,146 55	2	1,986 27	54 54	57
					58
690,191 12	3,529 37	2	17,808 82	73 27	59
106,799 17		2	2,115 98	58 97	59 1/2
91,670 24	956 98	2	1,887 40	19 14	60

## MICHIGAN RAILROAD RETURNS.

## 16.—TAXES PAYABLE JULY 1, 1890.—CONTINUED.

Line No.	Railroads.	Miles of Road Operated in Michigan.
61	Toledo & South Haven.....	36.00
62	Traverse City.....	26.00
63	Wabash.....	79.10
64	Wisconsin Central.....	
65	Detroit Union Railroad Depot & Station Co.....	
	Total for commercial roads.....	6,543.35
	ORE AND FOREST ROADS.	
1	Bear Lake & Eastern.....	18.00
2	Colfax & Big Rapids.....	10.00
3	Crawford & Manistee River.....	10.00
4	Grass Lake & Manistee River.....	12.00
5	Hecla & Torch Lake.....	7.50
6	Hobart & Manistee River.....	9.24
7	Lake County.....	11.00
8	Manistee & Luther.....	37.50
9	North Branch & Sanble River.....	10.00
	Total for ore and forest roads.....	125.24
	Total for all roads.....	6,668.59

## 17.—ACCIDENTS—GENERAL STATEMENT.

Line No.	Railroads.	Killed.			
		Passen- gers.	Em- ployes.	Others.	Total.
1	Battle Creek & Sturgis.....				
2	Bay City & Battle Creek.....				
3	Chicago, Detroit & C. G. T. Junction.....		1	1	2
4	Chicago & Grand Trunk.....		3	3	6
5	Chicago, Kalamazoo & Saginaw.....				
6	Chicago & Northwestern.....	8	8	8	19
7	Chicago & West Michigan.....	1	1	7	9
8	Cincinnati, Jackson & Mackinaw.....			1	1
9	Cincinnati, Jackson & Mackinaw—W. H. Brown, Rec.....			2	2
10	Cincinnati, Wabash & Michigan.....		1		1
11	Detroit, Bay City & Alpena.....		2	3	5
12	Detroit, Grand Haven & Milwaukee.....			4	4
13	Detroit, Lansing & Northern.....		3	4	7
14	Grand Rapids, Lansing & Detroit.....				
15	Saginaw & Western.....				
16	Duluth, South Shore & Atlantic.....	2	3	6	11
17	Marquette, Houghton & Ontonagon.....				
18	Marquette & Western.....				
19	Flint & Pere Marquette.....		5	10	15
20	Manistee.....				
21	Port Huron & Northwestern.....				
22	Saginaw & Clare County.....				
23	Saginaw & Mt. Pleasant.....				
24	Frankfort & Southeastern.....				
25	Grand Rapids & Indiana.....		2	4	6
26	Hancock & Calumet.....				

# TABULAR STATEMENT.

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## TAXES PAYABLE JULY 1, 1890.—CONTINUED.

Gross Earnings as Reported for Michigan.	Gross Earnings per mile of road operated.	Per cent of Taxation on taxable income.	Total Taxes Assessed for Michigan.	Taxes per mile of road operated in Michigan.	Line No.
\$24,182 98	\$860 74	2	\$488 66	\$18 21	61
47,028 04	1,808 77	2	940 46	34 64	62
426,518 12	4,571 98	2.25	9,681 54	121 77	63
127,752 71		2.50	3,198 81		64
					65
\$34,201,117 83	\$5,226 85	2.19	\$749,764 58	\$114 58	
10,708 61	594 92	2	214 17	11 89	1
1,983 93	198 89	2	39 68	3 98	2
14,785 86	1,478 59	2	294 72	29 47	3
12,787 32	1,065 44	2	255 75	21 31	4
97,454 56	12,993 94	2.69	2,623 64	349 82	5
32,281 73	3,498 69	2	645 68	68 79	6
20,061 06	1,823 73	2	401 23	36 47	7
187,888 23	2,146 69	2	2,747 76	73 27	8
12,889 44	1,238 94	2	247 79	24 77	9
\$889,790 76	\$2,718 11	2.19	\$7,470 36	\$59 65	
\$34,540,908 59	\$5,187 42	2.19	\$757,234 94	\$118 52	

## ACCIDENTS.—CONTINUED.

Injured.				Total Accidents.	Responsibility for Accident.		Trespassers and Tramps.	Drunk.	Suicides.	Line No.
Passengers.	Employees.	Others.	Total.		Clearly Accidental.	From negligence or lack of caution.				
	1	2	3	5	2	3	2			1
10	25	5	40	46	19	27	1			2
	1	1	1	1	1				1	3
4	24	8	31	50	11	49	9	8	1	4
	8	2	10	19	7	12	3			5
	8	1	9	10	2	8	2			6
	8		3	5	1	4	2			7
	2		2	3	1	2				8
	2		2	7	3	4		1		9
	3	7	10	14	2	12	7	1		10
	5	2	7	14	5	9	2			11
										12
	9	4	13	24	6	18	6	8		13
										14
	35	6	41	56	7	49	10	4		15
										16
										17
										18
1	19	5	25	31	14	17	3	1		19
										20
										21
										22
										23
										24
										25
										26

## MICHIGAN RAILROAD RETURNS.

## 17.—ACCIDENTS.—CONTINUED.

Line No.	Railroads.	Killed.			
		Passen- gers.	Em- ployes.	Others.	Total.
27	Lake Shore & Michigan Southern System.....		7	13	20
28	Detroit, Hillsdale & Southwestern.....				
29	Detroit, Monroe & Toledo.....				
30	Fort Wayne & Jackson.....				
31	Kalamazoo, Allegan & Grand Rapids.....				
32	Kalamazoo & White Pigeon.....				
33	Northern Central Michigan.....				
34	Lowell & Hastings.....				
35	Manistee & Northeastern.....			2	2
36	Manistique.....				
37	Mason & Oceana.....		1	1	2
38	Michigan Air Line Railway.....				
39	Michigan Central System.....	2	18	29	49
40	Canada Southern Bridge.....				
41	Detroit & Bay City.....				
42	Grand River Valley.....				
43	Jackson, Lansing & Saginaw.....				
44	Kalamazoo & South Haven.....				
45	Michigan Air Line R. R.....				
46	Michigan Midland & Canada.....				
47	Saginaw Bay & Northwestern.....				
48	Toledo, Canada Southern & Detroit.....				
49	Milwaukee, Lake Shore & Western.....		2	3	5
50	Milwaukee & Northern.....		1		1
51	Mineral Range.....				
52	Minneapolis, St. Paul & Sault Ste. Marie.....				
53	Muskegon, Grand Rapids & Indiana.....	a			
54	Ontonagon & Brule River.....				
55	Pontiac, Oxford & Northern.....				
56	Saginaw, Tuscola & Huron.....			1	1
57	Saginaw Valley & St. Louis.....				
58	Saginaw & Grand Rapids.....				
59	Toledo, Ann Arbor & North Michigan.....			6	6
60	Toledo, Saginaw & Muskegon.....				
61	Toledo & South Haven.....				
62	Traverse City.....	a			
63	Wabash.....		1	1	2
64	Wisconsin Central.....				
65	Detroit Union Railroad Depot & Station Company.....				
	Total for commercial roads.....	8	59	109	176
	ORE AND FOREST ROADS.				
1	Bear Lake & Eastern.....				
2	Buckley & Douglas.....	b			
3	Crawford & Manistee River.....				
4	Grass Lake & Manistee River.....				
5	Hecla & Torch Lake.....			1	1
6	Hobart & Manistee River.....				
7	Lake County.....				
8	Manistee & Luther.....		1		1
	Total for ore and forest roads.....		1	1	2
	Total for all roads.....	8	60	110	178

a Included with Grand Rapids &amp; Indiana.

# TABULAR STATEMENT.

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## ACCIDENTS.—CONTINUED.

Injured.				Total Accidents.	Responsibility for Accident.		Trespass- ers and Tramps.	Drunk.	Suicides.	Line No.
Passen- gers.	Em- ployes.	Others.	Total.		Clearly Accidental.	From neg- ligence or lack of caution.				
2	16	5	23	43	4	39	9	3		27
										28
										29
										30
										31
										32
										33
		1	1			3		3		34
										35
					1	1				36
1		1	2	2	2	2	1			37
6	51	31	88	137	15	122	30	2	1	38
										39
										40
										41
										42
										43
										44
										45
										46
										47
										48
1	23	7	31	36	8	28	7	1		49
	10		10	11	11					50
	19		19	19	12	7				51
										52
										53
										54
	1		1	1		1				55
	2		3	4		4				56
		1	1	1		1	1			57
										58
3	1	4	10			10	2	2		59
										60
										61
1	7		8	10	4	6				62
	4	1	5	5		5				63
										64
										65
26	231	36	303	569	115	454	97	28	3	
										1
										2
										3
					1					4
										5
	1		1	1		1				6
					1					7
										8
	1		1	3	2	1				
26	232	36	304	572	117	455	97	28	3	

b Absorbed by Manistee & Northeastern.

## MICHIGAN RAILROAD RETURNS.

## 17 A.—ACCIDENTS—CLASSIFIED.

Line Number.	Railroads.	Collisions.						Coupling Cars.					
		Killed.			Injured.			Killed.			Injured.		
		Passengers.	Employees.	Others.	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.
1	Battle Creek & Sturgis.....												
2	Bay City & Battle Creek.....												
3	Chicago, Detroit & C. G. T. Junction.....												
4	Chicago & Grand Trunk.....				8	2						12	
5	Chicago, Kalamazoo & Saginaw.....												
6	Chicago & Northwestern.....											11	
7	Chicago & West Michigan.....											5	
8	Cincinnati, Jackson & Mackinaw.....											4	
9	Cin., Jackson & Mack., W. H. Brown, Receiver.....											1	
10	Cincinnati, Wabash & Michigan.....											1	
11	Detroit, Bay City & Alpena.....											2	
12	Detroit, Grand Haven & Milwaukee.....												
13	Detroit, Lansing & Northern.....											2	
14	Grand Rapids, Lansing & Detroit.....												
15	Saginaw & Western.....											2	
16	Duluth, South Shore & Atlantic.....												
17	Marquette, Houghton & Ontonagon.....												
18	Marquette & Western.....												
19	Flint & Pere Marquette.....				2			1				22	
20	Manistee.....												
21	Fort Huron & Northwestern.....												
22	Saginaw & Clare County.....												
23	Saginaw & Mt. Pleasant.....												
24	Frankfort & Southeastern.....				2							18	
25	Grand Rapids & Indiana.....												
26	Hancock & Calumet.....												
27	Lake Shore & Michigan Southern System.....							2				12	
28	Detroit, Hillsdale & Southwestern.....												
29	Detroit, Monroe & Toledo.....												
30	Fort Wayne & Jackson.....												
31	Kalamazoo, Allegan & Grand Rapids.....												
32	Kalamazoo & White Pigeon.....												
33	Northern Central Michigan.....												
34	Lowell & Hastings.....												
35	Manistee & Northeastern.....												
36	Manistique.....												
37	Mason & Oceana.....							1					
38	Michigan Air Line Railway.....												
39	Michigan Central System.....		2					1				85	
40	Canada Southern Bridge.....												
41	Detroit & Bay City.....												
42	Grand River Valley.....												
43	Jackson, Lansing & Saginaw.....												
44	Kalamazoo & South Haven.....												
45	Michigan Air Line R. R.....												
46	Michigan Midland & Canada.....												
47	Saginaw Bay & Northwestern.....												
48	Toledo, Canada Southern & Detroit.....												
49	Milwaukee, Lake Shore & Western.....				2			1				5	
50	Milwaukee & Northern.....							1				10	
51	Mineral Range.....												
52	Minneapolis, St. Paul & Sault Ste. Marie.....											3	
53	Muskegon, Grand Rapids & Indiana.....												
54	Ontonagon & Brule River.....												
55	Pontiac, Oxford & Northern.....											1	
56	Saginaw, Tuscola & Huron.....											2	
57	Saginaw Valley & St. Louis.....												
58	Saginaw & Grand Rapids.....												
59	Toledo, Ann Arbor & North Michigan.....											2	
60	Toledo, Saginaw & Muskegon.....												

\* Included with the Grand Rapids & Indiana.



# TABULAR STATEMENT.

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## ACCIDENTS.—CONTINUED.

Derailments.					Falling from Trains.					Frogs.		Getting on and off Trains.						Highway Crossing				Line Number.
Killed.			Injured.		Killed.			Injured.		Killed.	Injured	Killed.			Injured.			Killed.		Injured.		
Passengers	Employees.	Others.	Passengers	Employees.	Others.	Passengers	Employees.	Others.	Passengers			Employees.	Others.	Passengers	Employees.	Others.	Passengers	Employees.	Others.	Passengers	Employees.	
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																					60	

b Absorbed by the Manistee & Northeastern.

## MICHIGAN RAILROAD RETURNS.

### 17 A.—ACCIDENTS.—CONTINUED.

Line Number.	Railroads.	Collisions.						Coupling Cars.					
		Killed.			Injured.			Killed.			Injured.		
		Passengers.	Employees.	Others.	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.
61	Toledo & South Haven.....												
62	Traverse City.....	a											
63	Wabash.....												
64	Wisconsin Central.....												
65	Detroit, Union R. R. Depot & Station Co.....												
	Total for commercial roads.....		2		3	8			7			152	
	ORE AND FOREST ROADS.												
1	Bear Lake & Eastern.....												
2	Buckley & Douglas.....	b											
3	Crawford & Manistee River.....												
4	Grass Lake & Manistee River.....												
5	Hecla & Torch Lake.....												
6	Hobart & Manistee River.....												
7	Lake County.....												
8	Manistee & Luther.....												
	Total for ore and forest roads.....												
	Total for all roads.....		2		3	8			7			152	

**17 B.—ACCIDENTS CLASSIFIED.—CONTINUED.**

[illegible]

## 695

Derailments.						Falling from Trains.									Frogs.						Getting on and off Trains.									Highway Crossing.						Line Number.
Killed.			Injured.			Killed.			Injured.			Killed.			Injured.			Killed.			Injured.			Killed.			Injured.									
Pas- sengers.	Em- ployees.	Others.	Pas- sengers.	Em- ployees.	Others.	Pas- sengers.	Em- ployees.	Others.	Pas- sengers.	Em- ployees.	Others.	Pas- sengers.	Em- ployees.	Others.	Pas- sengers.	Em- ployees.	Others.	Pas- sengers.	Em- ployees.	Others.	Pas- sengers.	Em- ployees.	Others.	Pas- sengers.	Em- ployees.	Others.										
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8	8		11	9	1	20			6	23	2		2			1		4	5	2		5	6	14												

[illegible]

## MICHIGAN RAILROAD RETURNS.

## 17 B.—ACCIDENTS CLASSIFIED.—CONTINUED.

Line Number.	Railroads.	Miscellaneous.						Overhead Obstructions.					
		Killed.			Injured.			Killed.			Injured.		
		Passengers.	Employees.	Others.	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.	Passengers.	Employees.	Others.
27	Lake Shore & Michigan Southern System.....		2	1		2			1				
28	Detroit, Hillsdale & Southwestern.....												
29	Detroit, Monroe & Toledo.....												
30	Fort Wayne & Jackson.....												
31	Kalamazoo, Allegan & Grand Rapids.....												
32	Kalamazoo & White Pigeon.....												
33	Northern Central Michigan.....												
34	Lowell & Hastings.....												
35	Manistee & Northeastern.....												
36	Manistique.....												
37	Mason & Oceana.....												
38	Michigan Air Line Railway.....												
39	Michigan Central System.....	1	10			10	8						
40	Canada Southern Bridge.....												
41	Detroit & Bay City.....												
42	Grand River Valley.....												
43	Jackson, Lansing & Saginaw.....												
44	Kalamazoo & South Haven.....												
45	Michigan Air Line R. R.....												
46	Michigan Midland & Canada.....												
47	Saginaw Bay & Northwestern.....												
48	Toledo, Canada Southern & Detroit.....												
49	Milwaukee, Lake Shore & Western.....					18							
50	Milwaukee & Northern.....												
51	Mineral Range.....												
52	Minneapolis, St. Paul & Sault Ste. Marie.....					12							
53	Muskegon, Grand Rapids & Indiana.....	a											
54	Ontonagon & Brule River.....												
55	Pontiac, Oxford & Northern.....												
56	Saginaw, Tuscola & Huron.....												
57	Saginaw Valley & St. Louis.....												
58	Saginaw & Grand Rapids.....												
59	Toledo, Ann Arbor & North Michigan.....					1							
60	Toledo, Saginaw & Muskegon.....												
61	Toledo & South Haven.....												
62	Traverse City.....	a											
63	Wabash.....					1							
64	Wisconsin Central.....					1	1						
65	Detroit Union R. R. Depot & Station Co.....												
	Total commercial roads.....	1	20	4		77	11		3			2	
	ORE AND FOREST ROADS.												
1	Bear Lake & Eastern.....												
2	Buckley & Douglas.....												
3	Crawford & Manistee River.....												
4	Grass Lake & Manistee River.....												
5	Hecla & Torch Lake.....												
6	Hobart & Manistee River.....												
7	Lake County.....												
8	Manistee & Luther.....												
9	North Branch & Sauble River.....												
	Total ore and forest roads.....												
	Total for all roads.....	1	20	4		77	11		3			2	

a Included with Grand Rapids &amp; Indiana.

## 697

[illegible]

## 17c.—CLASSIFICATION OF EMPLOYEES.

Line No.	Railroads.	Baggage-men. Number.	Brakemen. Number.	Conductors. Number.
1	Battle Creek & Sturgis.....			
2	Bay City & Battle Creek.....			
3	Chicago, Detroit & C. G. T. Junction.....			
4	Chicago & Grand Trunk.....	2	14	3
5	Chicago, Kalamazoo & Saginaw.....			
6	Chicago & Northwestern.....		10	6
7	Chicago & West Michigan.....		3	
8	Cincinnati, Jackson & Mackinaw.....		4	
9	Cincinnati, Saginaw & Mackinaw, W. H. Brown, Receiver.....		1	1
10	Cincinnati, Wabash & Michigan.....		3	
11	Detroit, Bay City & Alpena.....		3	1
12	Detroit, Grand Haven & Milwaukee.....			
13	Detroit, Lansing & Northern.....		5	1
14	Grand Rapids, Lansing & Detroit.....			
15	Saginaw & Western.....			
16	Duluth, South Shore & Atlantic.....		4	
17	Marquette, Houghton & Ontonagon.....			
18	Marquette & Western.....			
19	Flint & Pere Marquette.....		22	2
20	Manistee.....			
21	Port Huron & Northwestern.....			
22	Saginaw & Clare County.....			
23	Saginaw & Mt. Pleasant.....			
24	Frankfort & Southeastern.....		7	1
25	Grand Rapids & Indiana.....			
26	Hancock & Calumet.....			
27	Lake Shore & Michigan Southern System.....		13	2
28	Detroit, Hillsdale & Southwestern.....			
29	Detroit, Monroe & Toledo.....			
30	Fort Wayne & Jackson.....			
31	Kalamazoo, Allegan & Grand Rapids.....			
32	Kalamazoo & White Pigeon.....			
33	Northern Central Michigan.....			
34	Lowell & Hastings.....			
35	Manistee & Northeastern.....			
36	Manistique.....		1	
37	Mason & Oceana.....			
38	Michigan Air Line Railway.....			
39	Michigan Central System.....	1	25	2
40	Canada Southern Bridge.....			
41	Detroit & Bay City.....			
42	Grand River Valley.....			
43	Jackson, Lansing & Saginaw.....			
44	Kalamazoo & South Haven.....			
45	Michigan Air Line Railroad.....			
46	Michigan Midland & Canada.....			
47	Saginaw Bay & Northwestern.....			
48	Toledo, Canada Southern & Detroit.....			
49	Milwaukee, Lake Shore & Western.....		7	
50	Milwaukee & Northern.....		8	
51	Mineral Range.....			
52	Minneapolis, St. Paul & Sault Ste. Marie.....		8	1
53	Muskegon, Grand Rapids & Indiana.....			
54	Ontonagon & Brule River.....			
55	Pontiac, Oxford & Northern.....		1	
56	Saginaw, Tuscola & Huron.....		2	
57	Saginaw Valley & St. Louis.....			
58	Saginaw & Grand Rapids.....			
59	Toledo, Ann Arbor & North Michigan.....		3	
60	Toledo, Saginaw & Muskegon.....	a		

a Included with G. R. &amp; I.

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[illegible]

## MICHIGAN RAILROAD RETURNS.

## 17c.—CLASSIFICATION OF EMPLOYEES.

Line No.	Railroads.	Baggage-men. Number.	Brakemen. Number.	Conductors. Number.
61	Toledo & South Haven .....			
62	Traverse City .....	2		
63	Wabash .....		1	1
64	Wisconsin Central .....			
65	Detroit, Union R. R. Depot & Station Co. ....			
	<b>Total commercial roads .....</b>	<b>3</b>	<b>145</b>	<b>21</b>
	<b>ORE AND FOREST ROADS.</b>			
1	Bear Lake & Eastern .....			
2	Buckley & Douglas .....			
3	Crawford & Manistee River .....			
4	Grass Lake & Manistee River .....			
5	Hecla & Torch Lake .....			
6	Hobart & Manistee River .....		1	
7	Lake County .....			
8	Manistee & Luther .....			
	<b>Total ore and forest roads .....</b>		<b>1</b>	
	<b>Total for all roads .....</b>	<b>3</b>	<b>146</b>	<b>21</b>



TABULAR STATEMENT.

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KILLED AND INJURED.

Engineers. Number.	Firemen. Number.	Laborers. Number.	Shopmen. Number.	Yardmen. Number.	Unclassified. Number.	Total Killed. Number.	Total Injured. Number.	Total Number.	Line No.
									61
	1		5			1	7	8	62
		1		8			4	4	63
									64
									65
17	28	39	11	60	82	91	315	406	
									1
									2
									3
									4
									5
							1	1	6
									7
									8
							1	1	
17	28	39	11	60	82	91	316	407	

## MICHIGAN RAILROAD RETURNS.

18.—COMPARATIVE SUMMARY FROM ANNUAL REPORTS FOR 1888 AND 1889.

	1888.	1889.	Increase.	Decrease.	Per Cent of Increase.	Per Cent of Decrease.
<b>Length of roads owned.....Miles.</b>						
Length of roads operated.....	11,645.53	12,480.88	835.35		7.17	
Length of roads in Michigan.....	13,700.42	14,722.81	1,022.39		7.46	
Length of second track in Michigan.....	6,411.66	6,759.55	347.89		5.43	
Length of sidings in Michigan.....	120.00	120.00				
Computed as single track in Michigan.....	1,644.83	1,775.44	130.61		7.91	
	8,176.49	8,854.99	678.50		8.30	
<b>Capital stock paid in.....</b>						
Paid in per mile of road.....	\$389,377,986 09	\$355,049,272 84	\$34,328,713 25	\$4,381 80	23.99	17.50
Total funded debt.....	24,866 01	20,508 21	4,357 80		32.96	
Total floating debt.....	28,306,676 80	28,340,380 19	33,703 39		5.72	
Total debt.....	\$322,004,066 72	\$321,708,577 20	\$295,488 52		90.72	
Average debt per mile of road.....	25,312 13	25,312 13			83.35	
Total stock and debt.....	612,181,972 81	744,014,225 72	131,832,252 91		21.53	
Stock and debt per mile of road.....	50,176 14	59,535 55	9,359 41		18.64	
Total cost of roads and equipment.....	549,282,280 27	690,006,946 86	140,724,666 59		25.63	
Cost per mile of road.....	47,166 80	57,535 55	10,368 75		22.00	
Proportion of cost for Michigan.....	248,417,879 72	285,720,770 88	37,302,891 16		6.86	
<b>Earnings:</b>						
Passenger.....	\$21,890,494 05	\$23,482,970 34	\$1,592,476 29		7.29	
Express.....	1,612,271 25	1,660,129 23	47,857 98		2.96	
Mail.....	2,091,812 57	2,491,788 00	400,000 43		19.13	
Freight.....	54,040,875 86	59,132,921 86	5,092,046 00		9.42	
Other sources.....	159,963 67	451,708 30	291,744 63		182.82	
<b>Total from operation.....</b>	<b>\$79,778,407 40</b>	<b>\$87,219,728 28</b>	<b>\$7,441,320 88</b>		<b>9.34</b>	
<b>Per mile of road.....</b>						
Per train mile, passenger.....	\$5,809 64	\$5,994 22	\$184 58		1.97	
Per train mile, freight.....	1 10	1 04 04	59 16	\$0 05 06		
Per train mile for all trains earning revenue.....	1 13 7	1 23 19	9 46			
<b>In excess of operating expenses.....</b>						
Receipts in addition to traffic earnings.....	\$24,771,546 55	\$22,804,871 28	\$1,966,675 27			8.74
	1,235,017 06	926,565 10	\$308,451 96			26.14
<b>Total revenue from all sources.....</b>	<b>\$81,028,424 48</b>	<b>\$88,146,594 88</b>	<b>\$7,118,170 40</b>		<b>8.78</b>	

# TABULAR STATEMENT.

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<i>Operating Expenses:</i>					
Maintenance of way.....	\$11,604,422 51	\$13,325,210 77	\$1,720,788 26		14.82
Maintenance of rolling stock.....	8,689,225 35	10,321,906 23	2,166,675 22		26.94
Conducting transportation.....	28,144,779 04	32,104,857 56	3,965,078 52		14.08
General expenses and taxes.....	7,213,483 86	8,887,880 39	1,644,446 44		22.79
<b>Total operating expenses and taxes.....</b>	<b>\$35,001,880 85</b>	<b>\$64,614,864 95</b>	<b>\$9,612,984 10</b>		<b>17.47</b>
<b>Per mile of road.</b>					
Per train mile.....	\$4,002 88	\$4,888 01	\$385 13		9.62
Per cent of earnings.....	86.8	0 98.94	0 07 14		
	68.90	74 08	5 18		
<b>Interest and rentals—total.</b>					
Per mile of road operated.....	\$18,673,487 16	\$19,621,886 73	\$948,399 57		5.07
Per train mile.....	1,362 91	1,332 77		\$0 30.14	2.21
Per cent of earnings.....	29.47	0 27 49		01.98	
	23.40	30.36	6.96		
<b>Operating expenses, interest and rentals.</b>					
Per mile of road operated.....	\$73,673,318 01	\$84,236,741 68	\$10,561,423 67		14.34
Per train mile.....	5,365 79	5,720 73	354 99		6.80
Per cent of earnings.....	1 16.25	1 30.33	0 14.08		
	92.85	98.58	4.23		
<b>Train Mileage:</b>					
Passenger.....	22,285,998	26,675,604	8,889,698		10.26
Freight.....	40,044,160	44,702,514	4,658,354		11.63
<b>Total earning revenue.....</b>	<b>68,330,156</b>	<b>71,378,208</b>	<b>8,048,052</b>		<b>12.70</b>
<b>Traffic, Passenger:</b>					
Whole number passengers carried.....	27,486,106	31,136,060	8,699,944		13.48
Whole number carried one mile.....	1,018,018,108	1,139,527,824	121,509,716		11.98
Average distance traveled by each—miles.....	37.10	30.63	6.47		27.44
Average rate of fare per mile.....	\$0 02.158	\$0 02.48	\$0 00.27		
<b>Traffic, Freight:</b>					
Total tons moved.....	45,785,178	54,569,264	8,984,091		19.82
Average ton haul—miles.....	6,814,767,273	7,790,632,208	975,844,680		14.82
Average ton haul—miles.....	150 31	142 76	7 58		5.02
Average rate per ton per mile.....	\$0 00.794	\$0 00.754	\$0 00.040		

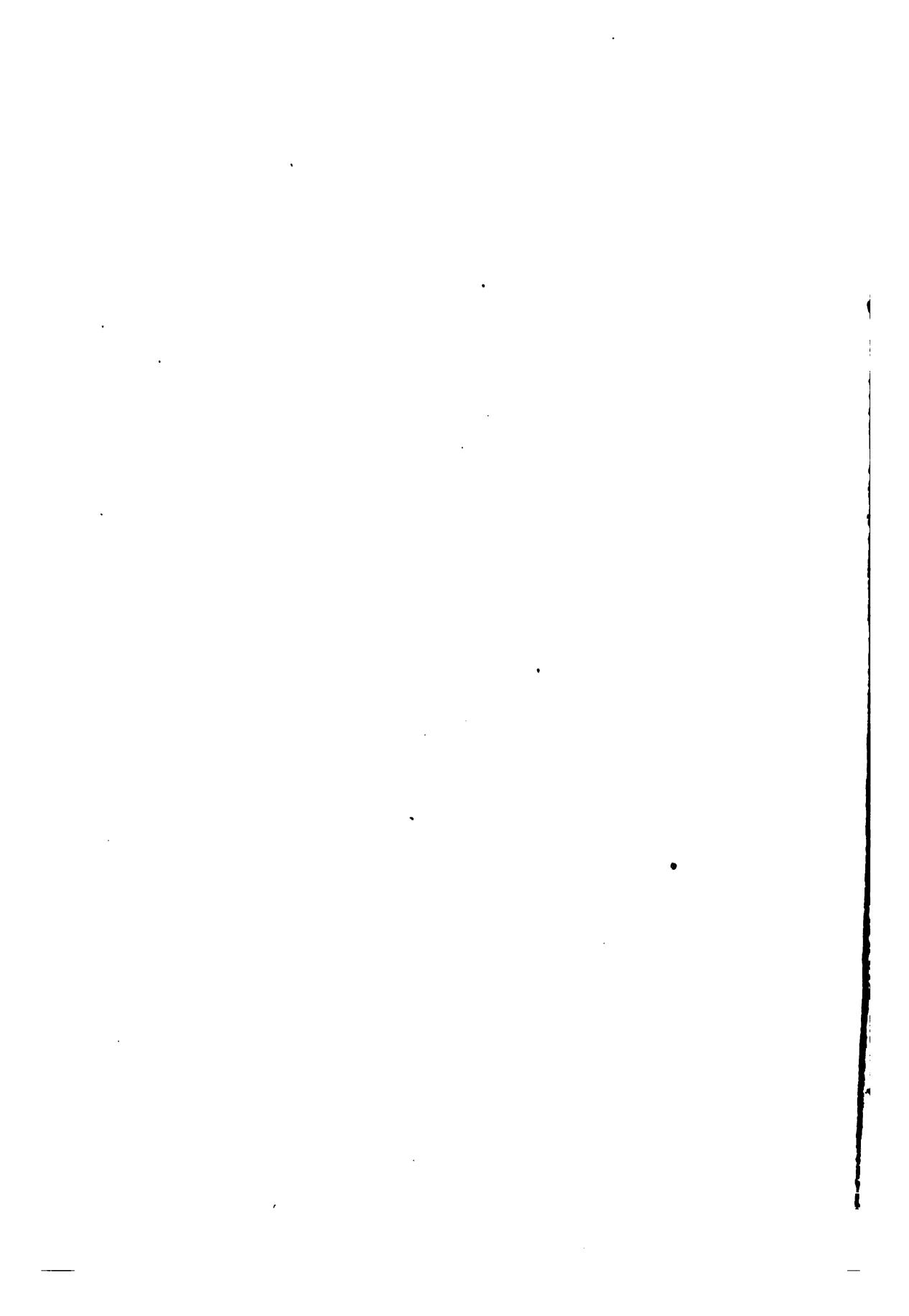
## MICHIGAN RAILROAD RETURNS.

19.—COMPARATIVE SUMMARY OF ANNUAL REPORT FOR FIVE YEARS, 1885 TO 1889.

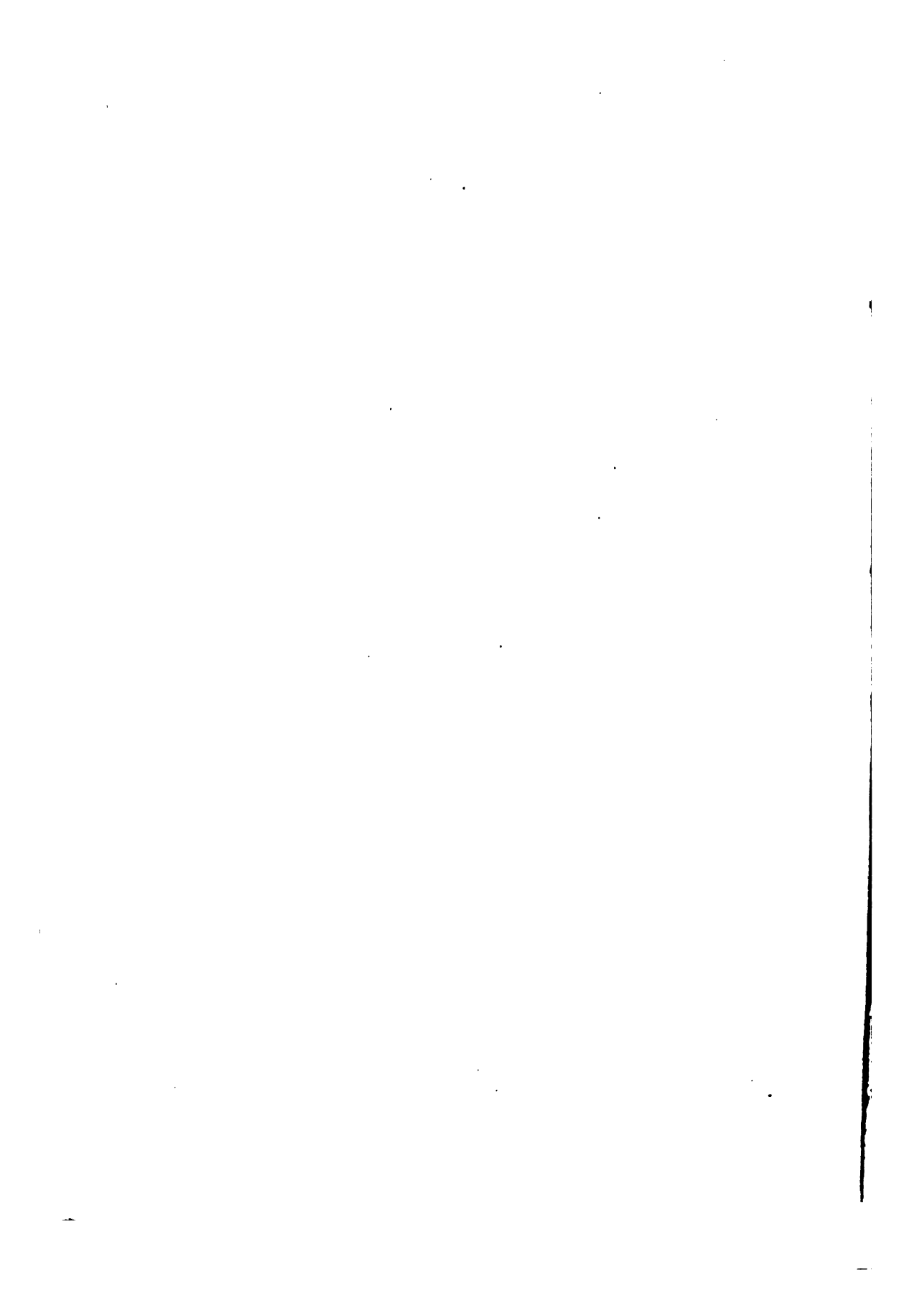
	1885	1886	1887	1888	1889
Total length of railroad and branches,—miles.....	11,611.57	11,164.84	11,982.91	11,645.53	12,490.28
Total length of railroads in Michigan,—miles.....	5,247.48	5,577.68	5,768.41	6,411.66	6,756.55
Total length of double track,—miles.....	90.10	89.00	121.10	120.00	120.00
Total length of sidings,—miles.....	1,155.90	1,262.80	1,490.68	1,644.88	1,775.44
Capital stock paid in.....	\$280,145,285 34	\$276,945,554 00	\$282,128,928 87	\$289,577,986 00	\$355,940,272 84
Capital stock paid in per mile of road.....	24,168 00	24,707 12	21,986 71	24,866 01	20,506 21
Total funded debt.....	\$80,696,163 28	\$28,228,168 38	261,021,980 63	268,797,359 92	395,368,187 01
Total unfunded debt.....	26,960,802 08	25,170,554 35	25,434,821 40	26,806,676 80	29,340,380 19
Total debt.....	\$107,656,965 36	\$53,398,722 73	286,456,802 03	\$295,604,036 72	\$424,708,567 20
Total debt per mile of road.....	90,866 00	31,664 06	24,006 00	25,312 18	38,757 00
Total stock and debt.....	\$380,076,025 02	\$303,240,271 68	\$568,588,780 90	\$612,181,972 81	\$744,014,225 72
Total stock and debt per mile of road.....	54,284 07	56,451 18	45,972 71	50,178 14	59,535 55
Total cost of roads and equipment.....	\$79,582,990 14	\$79,945,425 48	\$99,601,490 52	\$49,282,290 27	\$60,006,646 56
Total cost of roads and equipment per mile.....	49,966 00	51,946 23	41,081 00	47,166 80	55,207 63
Proportion of cost for Michigan.....	\$20,670,912 52	\$218,864,228 97	\$240,157,066 80	\$248,417,879 72	\$265,720,770 83
Earnings:					
From passengers.....	\$19,782,663 96	\$21,275,478 05	\$21,382,606 88	\$21,989,494 05	\$28,482,870 24
From mails.....	1,775,768 63	1,584,588 11	1,874,818 88	2,091,312 57	2,401,784 00
From Express.....	\$1,167,120 07	\$2,064,372 64	\$1,548,568 04	\$1,612,271 25	\$1,660,420 84
From freight.....	\$2,742,237 31	\$7,187,406 08	\$6,672,982 95	\$4,040,875 86	\$5,132,921 86
From other sources.....	\$85,082 88	\$22,186 64	\$6,962 10	\$59,983 67	\$51,706 20
Total earnings.....	\$76,952,864 80	\$32,894,085 47	\$31,556,252 85	\$79,778,407 40	\$87,219,726 28
Earnings per mile of road.....	\$5,797 00	\$6,047 66	\$6,574 95	\$5,809 64	\$5,924 22
Earnings per train mile,—passenger trains.....	0 85.54	1 07	1 18.8	1 10	1 04.04
Earnings per train mile,—freight trains.....	1 86	1 51.88	1 52.6	1 12.7	1 83.02
Earnings per train mile,—all trains.....	1 24.9	1 84.42	1 40.48	1 11.7	1 22.19
Earnings above operating expenses.....	\$22,814,179 29	\$28,617,411 26	\$29,166,268 55	\$24,771,546 55	\$22,604,871 83
Receipts in addition to earnings.....	\$1,214,589 31	\$1,800,988 88	\$1,867,460 19	\$1,255,017 08	\$926,865 10
Total receipts for the year.....	\$78,197,404 61	\$84,184,900 80	\$82,923,722 04	\$81,028,424 48	\$88,146,594 88

## 705

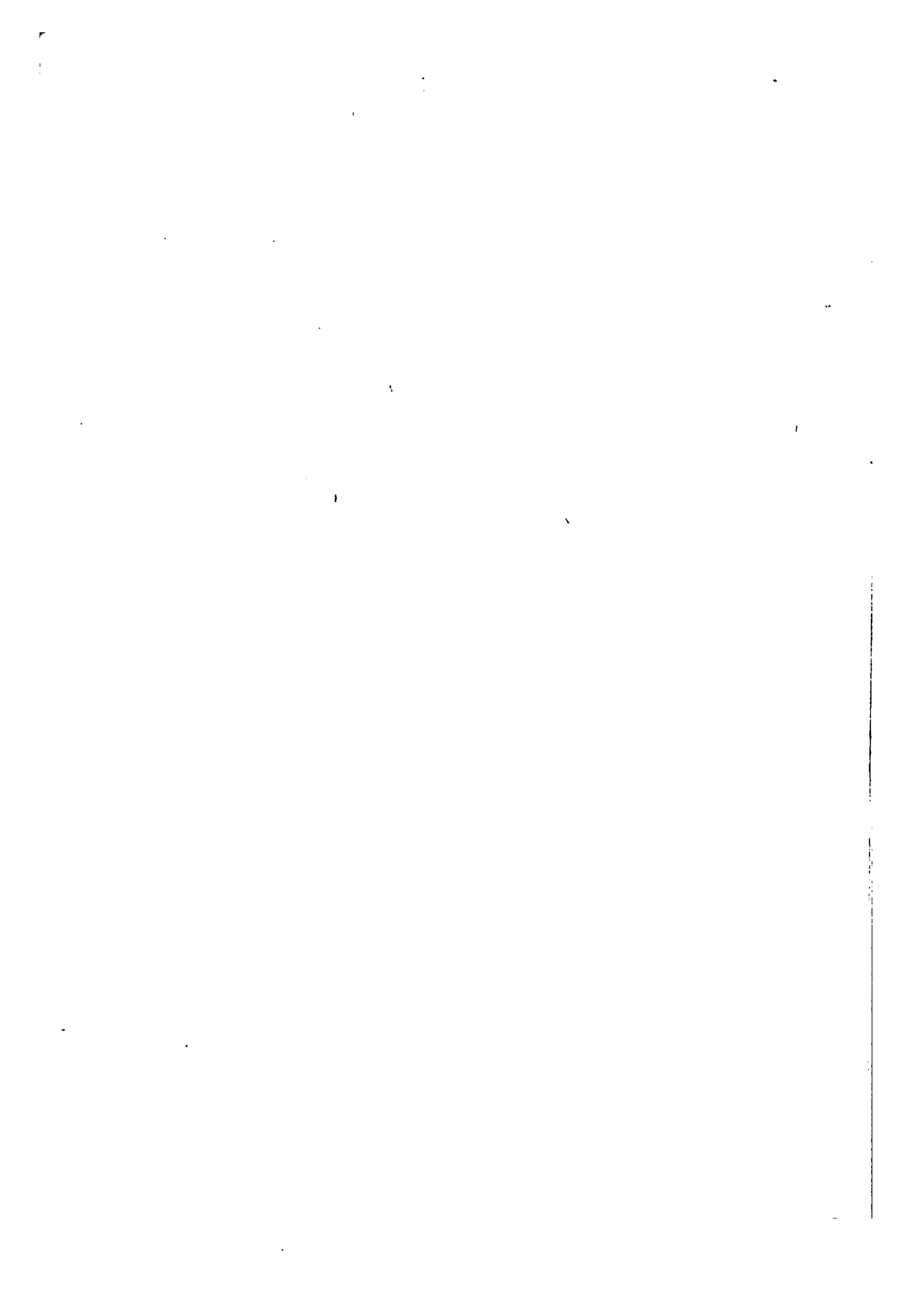
<b>Expenses:</b>	\$11,190,667 15	\$12,121,071 83	\$11,296,088 62	\$11,604,422 51	\$18,825,210 77
Operating expenses,—maintenance of way and buildings.....	8,119,431 16	8,138,560 24	8,129,357 53	8,090,225 35	10,831,966 23
Operating expenses,— motive power and cars .....	27,461,632 13	26,627,559 96	26,824,970 92	28,144,779 04	32,109,867 56
Operating expenses,—conducting transportation.....	7,940,368 69	7,394,368 56	6,669,417 13	7,213,433 96	8,837,980 80
Operating expenses,—general expenses.....					
Total operating expenses.....	\$54,138,665 01	\$54,216,624 19	\$52,689,964 30	\$55,001,980 85	\$64,614,854 95
Operating expenses per mile of road..... •	\$4,690 07 0 87.9	\$3,958 32 0 87.97	\$4,216 34 0 90.09	\$4,002 88 0 86.8	\$4,898 01 0 88.94
Operating expenses per train mile.....	70.35	65.45	64.23	68.90	74.08
Interest and rentals,—total.....	\$18,081,905 00	\$19,540,819 85	\$17,855,110 33	\$18,678,487 16	\$19,621,896 73
Interest and rentals per mile of road.....	1,556 43 0 29.37	1,666 09 0 30.08	1,489 37 0 30.75	1,363 91 0 27.47	1,332 77 0 27.49
Interest and rentals per train mile.....	23.13	21.81	21.77	23.40	30.36
Operating expenses, interest and rentals,—total.....	\$72,020,590 01	\$73,757,444 04	\$70,245,094 08	\$73,675,348 01	\$84,236,741 68
Operating expenses,—interest and rentals per mile of road.....	\$6,216 07 1 17.27	\$6,516 95 1 13.05	\$5,655 71 1 20.85	\$5,365 79 1 16.25	\$5,720 78 1 30.33
Operating expenses,—interest and rentals per train mile.....	93.43	87.90	86.00	92.85	96.58
Average rate per ton mile.....	\$0 00.324	\$0 00.890	\$0 01.090	\$0 00.764	\$0 00.754

















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